

digital illustration

# background

Encyclopedia of how to draw

Draw with Photoshop! Landscapes  
and items that color the scene 46

Written by Zensuke Izumoji

#### ● 本書の内容について

本書では主にPhotoshop CCでのメニュー画面、ウィンドウ画面、操作方法を掲載しています。紹介する操作はPhotoshop CS6、CS5でも可能ですが、一部のメニュー表示などが異なる場合があります。また、ウィンドウやメニューなどの色をCS5以前の色と同様のライトグレーにしています。これはメニューの[編集]([Photoshop])→[環境設定]→[インターフェイス]→[アピアランス]→[カラーテーマ]で設定できます。

ショートカットキーはWindowsでのキー操作を表記し、「( )」の中にMac OS Xでのキー操作を表記しています。

本書に記載されている会社名、商品名、製品名などは一般に各社の登録商標または商標です。本書中では®、™マークは明記しておりません。

©2015 Izumoji Zensuke

本書の内容は著作権上の保護を受けています。著作権者・出版権者の文書による許諾を得ずに、本書の一部または全部を無断で複写・複製・転載することは禁じられています。

This document mainly describes menu screens, window screens, and operation methods in Photoshop CC. The operations introduced here are also possible in Photoshop CS6 and CS5, but some menu displays may differ. Also, the colors of windows, menus, etc. are set to light gray, similar to pre-CS5 colors. You can set it in [Color theme] Shortcut keys are written in Windows, and key operations in Mac OS X are shown in "⌘". is indicated.

Company names, product names, product names, etc. in this manual are generally registered trademarks or trademarks of their respective companies. this book

The TM mark is not specified inside.

© 2015 Izumoji Zensuke

The contents of this document are copyright protected. COPYRIGHT HOLDERS Unauthorized copying, duplication, or reproduction of part or all of this document is prohibited without the written permission of the publisher.



## Introduction

If you ask a person who is good at drawing the question, "I want to improve my drawing, what should I do?", what kind of answer will you get? I'm sure there are various answers, but I think the answers tend to be "just draw what you see" or "just draw a lot". The question is vague, so I'm at a loss for an answer, and in a way I think this answer is true.

But I think this answer is a little unfriendly. Not everyone can draw as they see it. This is because people see what they are conscious of and tend to overlook what they are not conscious of. People who like cars may remember the model of the car they passed by, but people who are not interested in cars may not even know the model or even the color of the car.

In this way, even if what we see is the same, what we see changes depending on whether we are conscious of it or not. So what do we have to do to see the object consciously? That is to acquire knowledge. If you have knowledge, you can direct your attention. By turning your consciousness, you can finally "paint what you see". Therefore, the answer to the previous question is, "After gaining knowledge, it is good to draw as many as you see."

So, when I was writing this book, I was conscious of it so that I could acquire that knowledge by reading this book. Do not use it as a commentary. Specifically, I tried to include the following contents as much as possible, although not all items.

### ● Know-how that is actually used at work

For the "Lake" item, the fluctuation of the surface of the water was expressed. For the "Office Chair" item, how to draw the legs using guide materials. And so on, I explain the know-how that I use in my daily work.

### ● Common NG examples

Knowing the NG examples makes it easier to understand than just looking at the correct answers. The NG examples in this book are contents that you tend to actually do if you are not careful, so reducing retakes has an immediate effect.

### ● Size and color information

By knowing the size data of an object, only one object is polar.

You will be able to focus your attention on not getting bigger or smaller on the edge. In addition, I tried to reproduce the same color by specifying the RGB values where the color was the point.

In order to include such information, this book omits basic usage of Photoshop and basic knowledge of perspective. A page is devoted to the knowledge necessary to draw the background.

Another great feature of this book. It is not a commentary on a single completed illustration, but how to draw each element of the background, such as natural objects such as "grassland", "trees", and room interiors such as "low table", "sofa", and "clock". The point is that it explains.

If you try to explain many completed illustrations in one book, you will end up with unexplained background elements, or rushing to explain one background element in about half a page. . Therefore, in this book, we have adopted an encyclopedia format in which each background element is divided into items and explained using 2 to 4 pages.

Even people who have read books and thought they couldn't draw in the same way will probably find some of the items in this book to be able to draw. And once you can draw one, all you have to do is combine two or three, and before you know it, you will be able to draw a solid, complete background.

I was able to make this book into a book that I myself would want my past self to read. Everyone has different knowledge before opening this book, so the knowledge I wanted to know in the past may not be useful to everyone. Nevertheless, I believe that there are people who will put this book on their side and use it when drawing backgrounds.

I hope that this book will allow you to draw the "background of Ority" that you thought you couldn't draw yet, and that you will know the joy of drawing backgrounds.

Izumoji Zensuke



digital illustration

# Background

## Drawing Encyclopedia

Photoshop

drawing

table of contents

null



nature weaving



blue sky and clouds

p.8



Entry

Cloud p.12



evening

sky p.16



night

sky p.201

null



cloudy

sky p.24



Rain

p.28



Universe

(p.32



Grass

p.36



Ground

p.40

緑

green



rock

p.44



trees

p.48



low 木

p.52



Leaf 葉

p.50



Sakura

p.60

緑



flower

p.63



山

p.66



palm

p.70



Haebe

p.74



lake

p.78

water



Water

pattern p.82



water

p.86



Water's

edge p.90

Indoor weaving



Lag

p.96



TV

p.100



Lowboard

p.104



low table

p.108

water



Downlight Ceiling light

p.112



p.116



Mirror

p.119



Office chair PET bottle

p.122



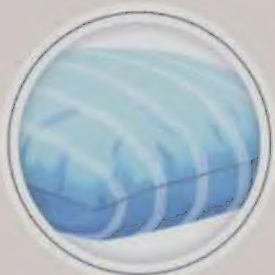
p.126





sofa

p.130



Cushion

p.134



Clock

p.138



Frames and

Paintings p.144



窓

p.148

[School]



Curtain

p.152



school

chair p.156



school

desk p.160



Blackboard

p.163



Lectern and

podium p.166



Cobblestone

p.172



Bamboo

fence p.176



Tatami

p.180



bran

p.184



Shoji

p.187

## Skillup

Gradation banding countermeasures 1 p.27

Gradation banding countermeasures 2 p.43

Layer comp p.92

Drawing water droplets p.94

string along path p.142

school classroom p.169

Japanese Room p.190

Types of bamboo fences p.195

Draw a line drawing  
in layer style p.196

## index

p.199





## nature weaving

空

Blue sky and clouds

Cumulonimbus

evening sky

night sky

cloudy sky

rain

universe

緑

grass

ground

岩

trees

surface shrub water edge

leaf

桜

花

山

palm

水

seaside

lake

pattern of water

water



# blue sky and clouds



Clouds come in many shapes. The WMO World Meteorological Organization (WMO) defines the classification of clouds as 10 types of clouds. There are 10 types of cumulonimbus and stratus clouds. "Volume", "High", "Layer", "" and "Ran" in each name represent the height and shape, and the height is classified into three types: "Volume", "High" and "None". There are two types of cloud formations: clustered cloud "stacks" and horizontally spreading clouds "layers". Clouds with "ran" are clouds that make it rain.

Here we draw cumulonimbus clouds, also called cotton clouds, which can be seen all year round.

## paint point

### 01

#### create a cloudless blue sky

Use the Gradient Tool to draw a gradient from white (R255, G255, B255) to blue (R67, G136, B206). If you only do this, it will become monotonous, so set the blending mode to [Overlay] and create a new layer, and use a large bokeh brush to fill in the middle.

By painting the center area with two shades of blue (R67, G136, B206) (R160, G170, B200), the gradation blends in even more.



Gradation from white to blue



Blend in with a large bokeh brush

## memo

### Bokeh big brush

A soft circle brush with the circle brush's thickness set to 0%. These are the default brushes in Photoshop.

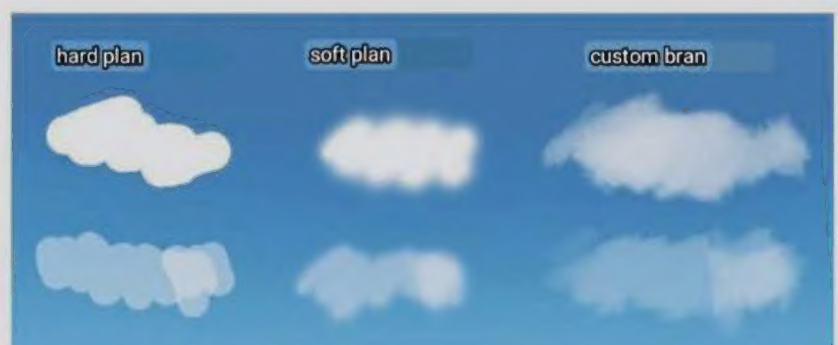


### 02

#### Choose a brush for drawing clouds

Brush selection is important when drawing clouds. A simple hard circle brush is too stiff, and a simple soft circle brush is too pockety.

In this example, I'm making a "Stam Brush" brush that fills like the one shown in the figure, but Photoshop has a large number of brushes registered, so you can try looking for a brush that has a similar filling feel.





## memo "Custom brush" Make a plush

### Registering [Brush tip shape]

First, create an image that will be used for the brush tip. For this image, the outline is not straight, but uneven, giving it an irregular shape, just like a rounded cloud.

Once you have created the image you want to register as the brush tip, select the area and select [Edit] → [Define Brush] from the menu. Enter a name in the Brush Name window and click OK. The registration of the brush tip shape is complete.

As soon as the registration is completed, you can select the registered [Brush tip shape] from the [Tool Options Panel].

### set brush

From the menu, select [Window]

[Brush] to open the [Brush] window and

set the brush. Set the three

items circled in red: [Shave] [Scatter]

[Other].

**D** is one of them [Shape] setting screen.

If you set [Size Jitter], [Angle This Jitter],

you can make the size and angle of the

plush change. At 0%, there is no change, and the

higher the value, the greater the change.

Also, by setting [Control] to ☐, the size and

angle will change depending on

the strength of the pen pressure.

If you set [Control] to [Pen Pressure] in the

same way on the [Spray] and [Other] settings screens,

the "Custom" brush settings are complete.

### Save the brush set in the [Brush]

window

Save the settings for the "custom brush" brush that has been set up so far, as it will be used for purposes other than drawing snow.

From the menu, select [Window]

[Tool Preset] to open the [Tool Preset]

window, click on the area

circled in red, and save it as a new tool preset.

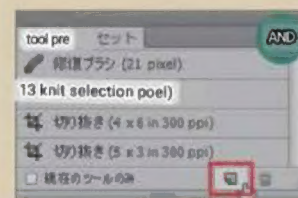
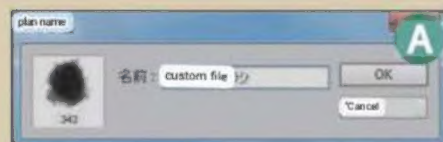
This saves not only the brush

tip, but also what you have

set with. You will be able to select

the "Custom Brush" brush from the

[Tool Presets] window.

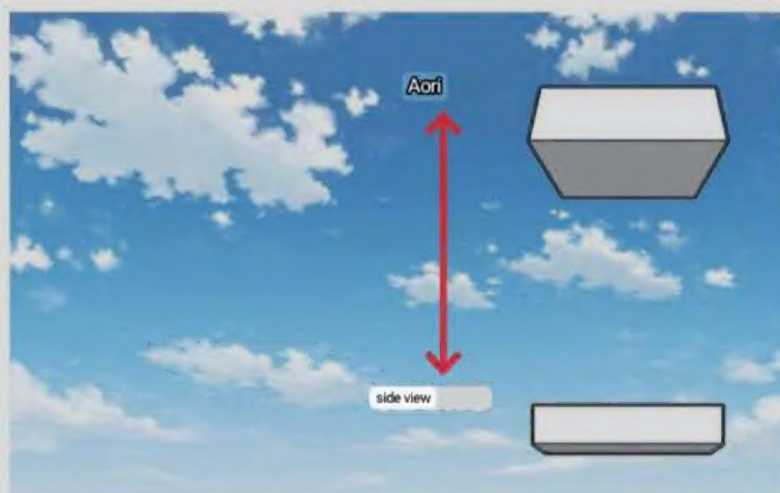
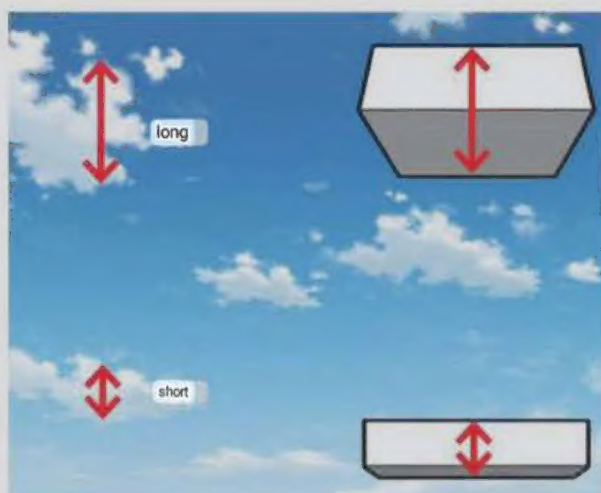


## 03

### Difference in appearance of clouds

The shape of the cloud changes depending on where it is on the screen. The lower part of the screen compared to the clouds at the upper part of the screen that become tilted

Since the cloud of is seen from the side, it becomes a horizontally long shape. Be careful not to make all the clouds have the same shape.





04

## Arrange the clouds in an S shape

Before drawing, think about where to place the clouds. This is because it would look unnatural if the clouds were evenly spaced. In order not to look unnatural, it is a good idea to imagine an S shape when arranging the clouds. By doing this, the horizontal position of the main clouds will be shifted, so it will be closer to the natural shape. In addition, the S-shaped composition allows the eye to flow from the front (top of the screen) to the back (bottom of the screen) to create a sense of depth.

In addition, the gradation part without clouds is also important for the composition of the sky. Intervals between clouds, clouds and roses in the sky

Layout elements such as stances can greatly affect the appearance of the sky.

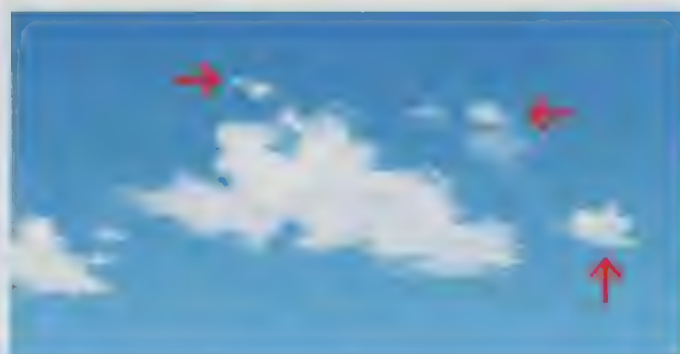


05

## draw clouds

**F** Don't draw it straight like , but make it uneven like . Another method is to draw in a straight line, and then erase it with an eraser to reduce the straight lines.

Whichever method you use to draw, make adjustments by repeatedly drawing and erasing with the [Brush Tool] and [Eraser Tool].



06

## shape up

Shaped with the [Brush Tool] and [Eraser Tool]. Use the [Brush Tool] as well as the [Eraser Tool] with the same settings as the "Custom Brush"

Brush

07

## add little clouds

Draw small torn clouds near the big snow.

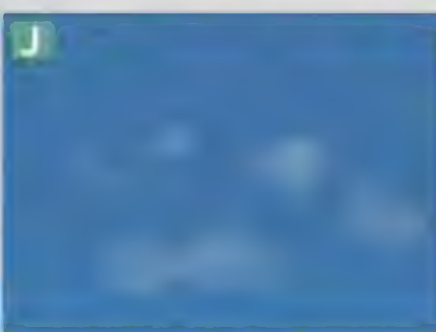
Draw a thin cloud with a brush with [Opacity] lowered. Even if you lower the [Opacity] of the brush, it may become dark when you draw over it.



vinegar. In that case, lighten it like the [Eraser tool] with the [Opacity] lowered. What you have to be careful about at this point is that you need to erase it in one stroke to lighten it with a uniform density. Multiple strokes will result in uneven erasing.

From the uniformly thinned state shown in ●, erase the surroundings and shave to create a cloud-like shape.

If you use the [Eraser Tool] with a hard circular brush, it will also be scraped off in a circular shape, so it is better to use something similar to the "custom brush" brush.



The clouds at the top of the screen will have tilt and shadows. The clouds at the bottom of the screen are viewed from the side, so shadows are not very visible. Note that not only the silhouette of the cloud but also the percentage of shade will change depending on the position of the cloud.

"It is important to suppress the temptation to paint shadows in a hurry, and to prepare the shape firmly with a pace layer drawn in a single white color on a single layer. It's not a problem if you just add some color, just paint the layer with [Opacity] set to "60%" with blue (R175, G215, B240).





# Into the humane cloud



There are more detailed types of cumulus clouds (p.8). Depending on the degree of development in the vertical direction (perpendicular to the ground) due to rising air currents, the clouds change from flat clouds to normal clouds to large clouds. By the way, the clouds drawn in "Blue Sky and Clouds" (p.8) are flat clouds. When the majestic cloud develops further and a large amount of rain and thunder occur, it becomes a cumulonimbus rather than a cumulus cloud. Cumulonimbus is the common name for the great earthquake and cumulonimbus. It can be seen in the summer 暖 because the surface of the earth is compressed in summer, which makes it easier for sudden updrafts to occur.

Clouds are formed up to the interface with the stratosphere called the tropopause, and cumulonimbus clouds that have developed to that height "The top collapses at the tropopause and begins to expand laterally. Here is Mokomo before it collapses like that. Draw a cumulonimbus cloud with an easy-to-understand shape.

## paint point

### 01 "Creating a custom scribble brush"

In "Blue Sky and Clouds", I drew the cloud base layer using the "Custom Brush" brush that makes use of changes in opacity according to pen pressure, but the thunderhead base layer is drawn without blurring the edges. Is needed.

Therefore, I will create a brush that will paint like the "Custom Hard Brush" brush in the illustration. If you set the 'Custom brush' brush size smaller and set it in the Brushes window and uncheck Shape and Other, it will become a custom 'Hard brush' brush. default hard circle brush

It is often too hard and not suitable for natural objects, but if you want to draw a clear petite like in this case, you can use a hard circle brush.

### 02 Paint the cloud base layer

After creating the sky gradation, create a new layer (thunderhead pace layer) to draw the clouds. Draw the central part, which is developed by updrafts, higher.



Nyudoyuki base layer



03

## Scrape with the [Eraser tool] to determine the rough shape

Use the Eraser Tool] to erase the straight parts to make unevenness.

Decide on a

rough shape here. First, shape the shape with a single white color.

It is important to decide I will paint the shadows of the clouds in a later step.

So, at this stage, proceed without rushing.

At this point, I don't fix the rough details, but just focus

on adjusting the balance of the cloud as a whole, first of all,

to make the whole thing convincing.



04

## Adjust cloud details

You may feel that there is not much change from 03, but the shapes of the clouds in detail have been corrected. Conversely, if there

seems to be a big change in the silhouette of the clouds here,

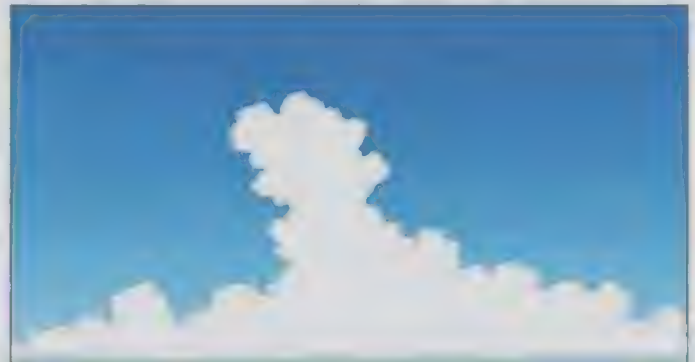
it means that the overall balance in the previous process was loose. In

order to avoid having to adjust the shape of the clouds on the base

layer at the same time after I start adding shadows, I sometimes go back

to the previous process and make sure that only the silhouette is a

satisfactory shape before proceeding to the next process.



05

## shade

Create a new layer (shade layer 1), apply a clipping

mask with the base layer of the thunderhead, and

then add the shadow color. The clipping mask allows

Shadow Layer 1 to paint only within the base layer's

clouds.

To create a clipping mask, select

[Layer] → [Create Clipping Mask]

from the menu. Alternatively, in the [Layers]

window, hold down the [Alt]

((option)) key and move the

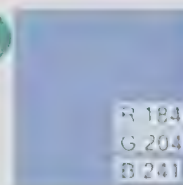
cursor between layers. increase.



B

A

B3



06

## Roughly determine the shape of the shadow

From the previous process up to here, the rough shape of the shadow is determined. As I mentioned in Base Layer, it's important not to skip the initial rough stages before moving forward.





Draw to shape the shadow. What I want to be careful about here is not to be noisy by drawing too much. Drawing through trial and error can sometimes lead to overdoing it and actually making things worse.

In order to avoid the NG example shown in the figure below, "Keep the range of light and dark that was decided at the time of the rough draft in the previous process", "Keep the shaded areas painted in almost a single color", and "Boundary between light and dark, etc. It is a good idea to keep in mind that even the necessary parts should be painted as simply as possible.



Create another layer for shadows (shadow layer 2) and apply a clipping mask in the same way as the first layer.

Apply a slightly lighter color than the first shade so that the white and shade blend together.



R 222  
G 231  
B 248

Create a layer filled with blue, and fill the layer with

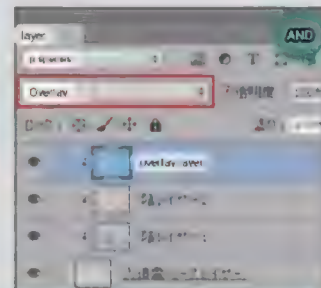
Set the blending mode to [Overlay] and click it in the same way as the shadow layer.

ping mask At this stage, it's still filled, so all shadows are

light blue. "In the next

step, I will use this [Overlay] layer to blend in the shadow color.

I will let you.



Erase from the outside with a large brush on the poke foot. carefully and politely

It's important to turn it off. You can also use the [Eraser Tool], but

It is a good idea to erase it with a layer mask (p.91) so that you can

adjust it. is an NG example. Although it is a gradation, if

you look closely, you can see that the [Overlay] effect is clearly

separated at the arrow, so you can see that I erased it by

stroking it directly below. By lowering the [Opacity] of the

brush and erasing according to the shape of the cloud, it will

look good when completed.



Create a new layer (shade layer 3), apply

a clipping mask to it, then set the

layer's blending mode to Overlay. Using the

color of , I darken some of the shadows

a bit with a brush with a large bokeh foot

and a low Opacity.

This is an adjustment for areas that have become

too bright in the previous process, so add only a

small amount.





# evening sky



The clear daytime sky is blue, but in the evening the color changes. Why does the daytime sky look blue in the first place?

This is because blue light, which has a short wavelength, easily collides with molecules in the air and diffuses. Light from the sun travels more distance through the atmosphere when the sun is on its side as it sets than when it is directly overhead. As the distance through the atmosphere increases, the short-wavelength blue light is dispersed along the way, and the sky is dyed in yellow and red, which have longer wavelengths and travel farther. Here, I will explain how to draw the evening sky and clouds.

## paint point

01

Determine the image of the color of the evening sky

If you think of the general evening sky, it might be the orange-colored sunset sky. There are cases where an orange sky like this matches the image of the scene, so of course it's not NG.

However, if you are painting the evening for the first time, it is also the color that you choose.

The color of the evening sky changes with time, and the color of the sunset changes depending on the day. That's right, even if the sky is still blue, you can paint it as an evening sky by changing the color of the clouds.

If there are people who have an image of the scene, such as a director or a client, check that image. After understanding that there are various colors in , decide on a color by considering what color suits your image.

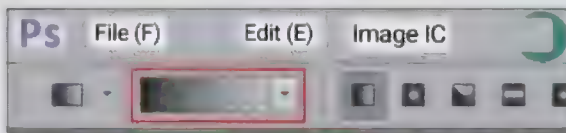
In the example, I draw a gradation of the evening sky from bright yellow to skin color, pink, and bluish purple.



## 02

## Draw the sky with the gradient editor

Create an empty gradient. A simple gradation layering method is also acceptable, but here we will introduce a method using the gradation editor. Select the [Gradient Tool] from the Toolbox and click the red box in the [Tool Option Bar] to open the [Gradient Editor] window. You can create a [color branch point] by clicking the lower part of . By creating multiple [color branch points] and selecting different colors, you can create a range of gradation changes.



## 03

## Adjust Gradient

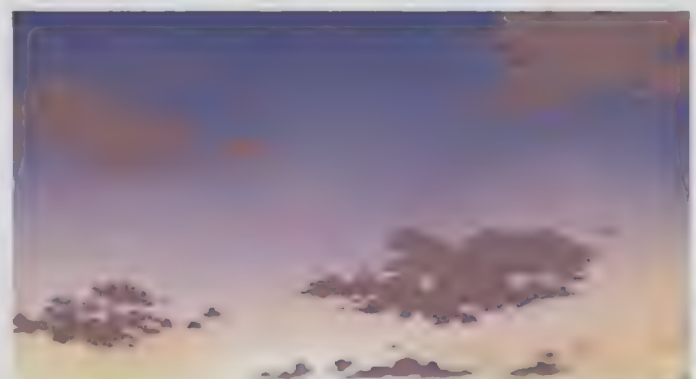
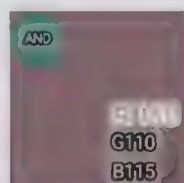
Use a large bokeh brush with the [Opacity] lowered to blend in areas where linear changes are conspicuous.



## 04

## Draw the cloud base layer

Draw clouds in the same way as "Blue sky and clouds" (p.8). At this point, the color is solid because it is the base layer.



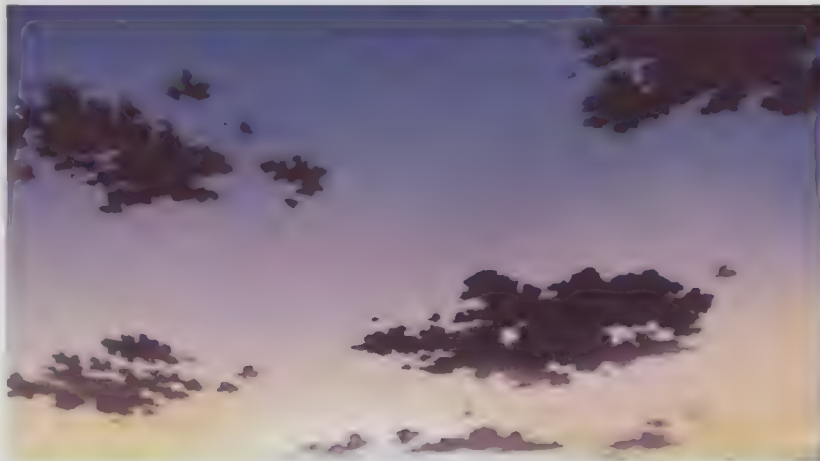


05

## darken clouds

Since the color of the sky is changed with a gradation, if the cloud color is a single color, it will be very different from the color of the sky.

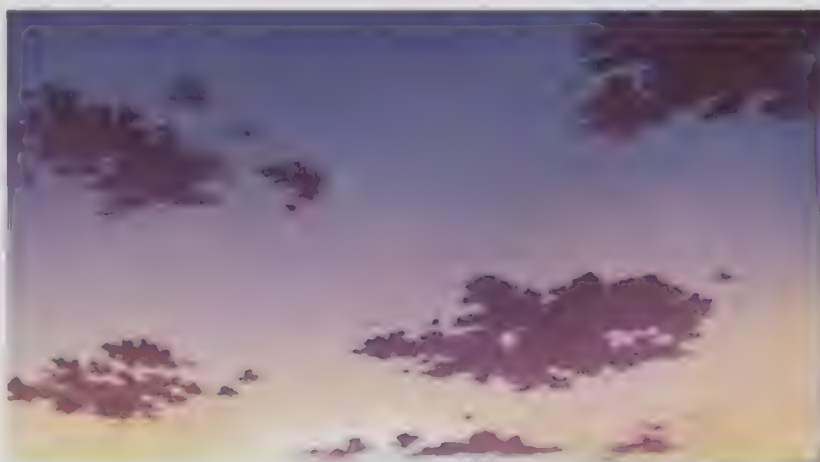
Dark Sky Darkens the clouds at the top of the screen. Apply a darker color (R55, G24, B42) with a large bokeh brush to the layer clipping masked with the cloud base layer. Since the sky color is lightened in the lower part of the screen, the cloud color is not painted with a dark color, and the color is kept as it is.



06

## Adjust cloud color

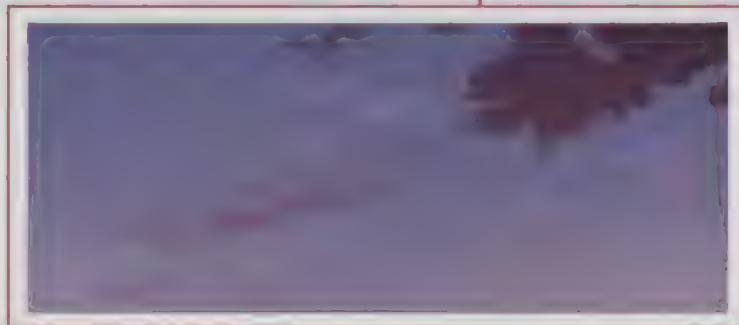
Areas that are too dark, such as the center of the screen Adjust the color of these clouds by painting with a bright color using a large bokeh brush.



07

## add thin clouds

Add thin clouds as you did for the blue sky clouds. Clouds are added not only to the enlarged central part, but also to the right and left arrow parts.





Adjust the color until the imaged color is obtained. Here, the purple clouds at the bottom of the screen have been changed to a yellow, illuminated color, and the color of the gradation in the sky has also been changed to create a better atmosphere.

\*Adjustment layers are used to adjust colors. Use adjustment layers such as [Color Balance] and [Hue/Saturation] to change colors, and [Level Correction] and [Exposure] to change sharpness and brightness.

You don't need to use all the adjustment layers above as you won't be making the same adjustments every time. Experiment with these to get closer to your image. There are

other ways to adjust colors besides adjustment layers. through

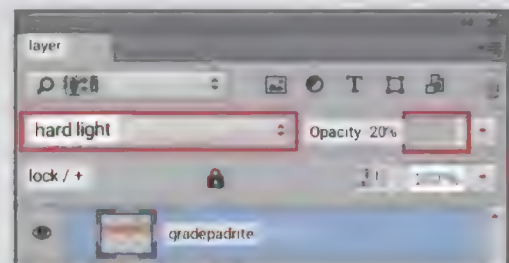


Always create a new layer and set the layer's blending mode to [Overlay] [Screen] [Soft Light] [Hard

Light] etc. and paint with a large bokeh brush

is. At this time as well, lower the [Opacity] of the layer.

You can adjust the strength of the effect with and .

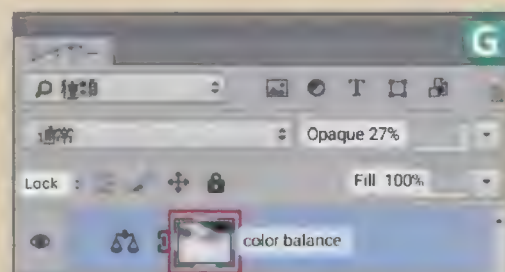


### an adjustment layer?

Adjustment layers are layers for applying various tonal corrections to an image. Select [Layer] [New Adjustment Layer] from the menu or click the black and white circular icon at the bottom of the [Layers] window to display the list.

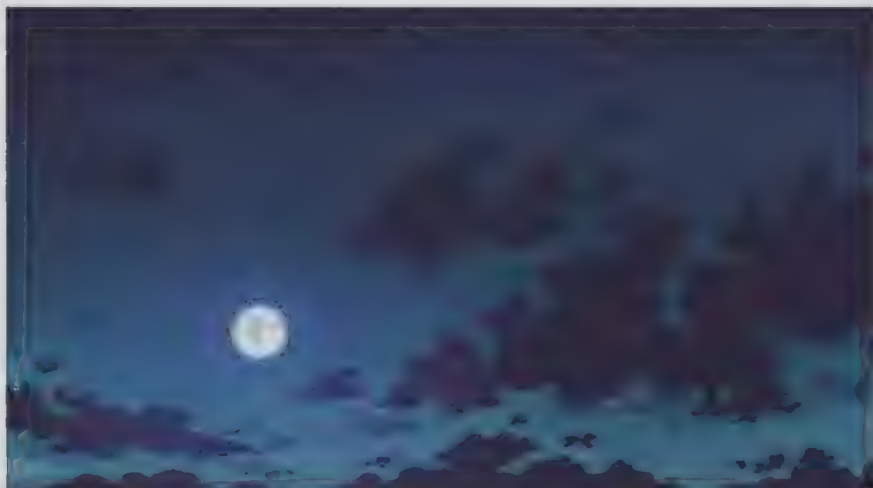


The list contains the same effect names as [Image] → [Tonal Correction] in the menu, but the advantage of using adjustment layers is that they are non-destructive. If you apply tonal correction directly to the image, it will be difficult to undo and it will deteriorate, but if you use adjustment layers, you can restore the original state simply by hiding the adjustment layers. You can also make finer adjustments by limiting the range of the adjustment layer effect with a layer mask (p.91) as shown in .





# night sky



The big difference between the night sky and the daytime or evening sky is that the stars are drawn.

The night sky can be created without drawing stars, but you can increase the density of the picture by adding stars

Here we draw silhouetted clouds in a color darker than the sky, stars and a full moon.

paint:point

## 01 Make a "star" brush

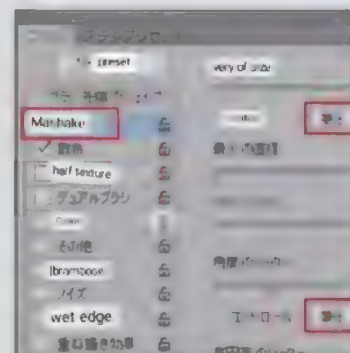
When drawing stars analogously, a method called sputtering is used, in which the paint scatters by blowing or hitting the brush, but when drawing digitally, a brush customized for the emperor is used.

increase. First, prepare an image with 4 or 5 dots as the tip of the brush. Since the brightness of stars varies, we don't make all the points the same size, but vary them. [Opacity] should also have a thin point in addition to the "100%" point. Register this in [Brush tip shape]. Then open the Brushes window and select the "Custom Brushes" brush (p.9) as well as Shape > Size Jitter

Set things like - and Angular Jitter to avoid constant brush size and angles, and also set the Control to Pen Pressure.



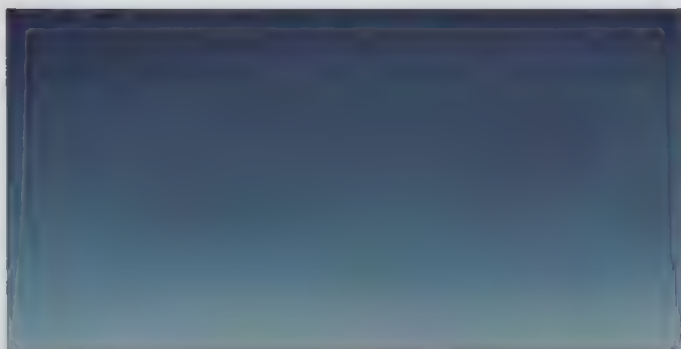
"Star" brush tip shape



## 02 draw the sky with gradient

Draw the sky with gradation like blue sky and evening sky.

vinegar



## 03 Draw a dot with the "star" brush

Draw dots with the "Star" brush on the newly created layer (star layer). Just stroke with the "Star" brush to draw star points as shown.



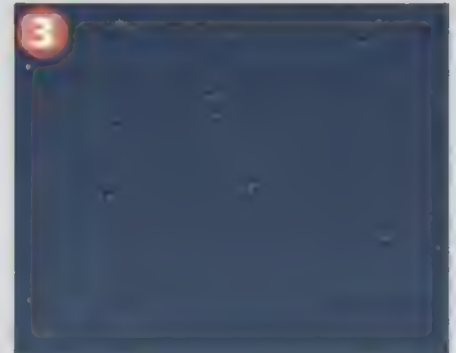
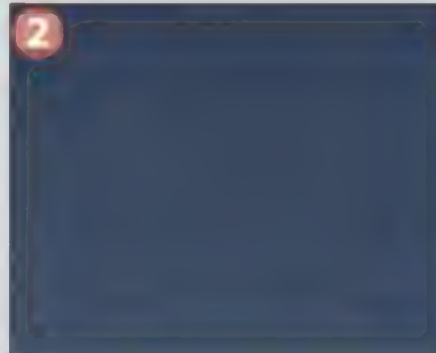
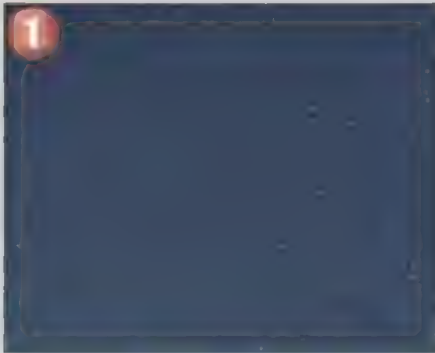
memo duplicate and draw a star

"An alternative to creating a 'star' brush is to draw a few dots, then duplicate, rotate, combine, duplicate, and repeat to draw a star.

① Duplicate the star layer and move or flip it to increase the number of stars

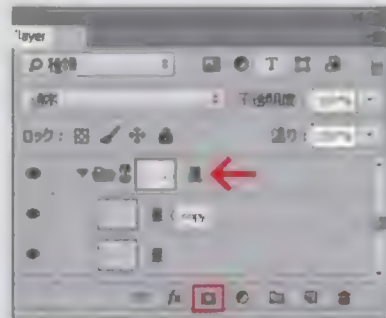
(2) Lower the [Opacity] of the star layer to make it lighter.

(3) Create a new layer and draw stars again.  
By drawing a new star after lightening it with 2, you can increase the brightness difference of the star.



If there are too many stars and there are places that stand out too much, partially erase the stars to make them lighter.

It is convenient to erase with a layer mask (p.91) so that it can be restored to its original state. A layer mask can be applied not only to a single layer but also to a layer group, so even if the star layer is duplicated, the entire group can be masked to make it thinner.



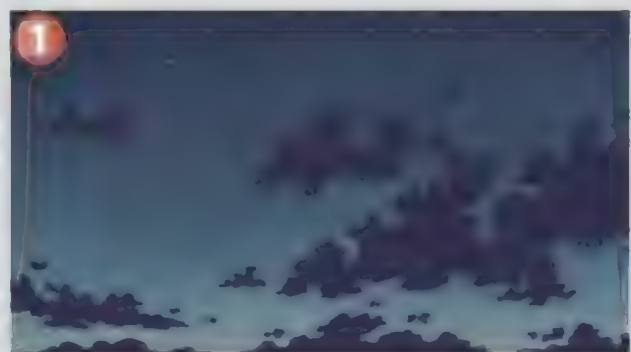
Create a new layer, select a blue color (R20, G100, B240) and click on the star you want to shine with a large bokeh brush. Set the blending mode of the layer to [Screen] and reduce the [Opacity] of the layer if the light is too strong and noticeable.

If the brilliance is not the color you imagined, select [Image] → [Adjustment] → [Hue/Saturation] from the menu to adjust the color.

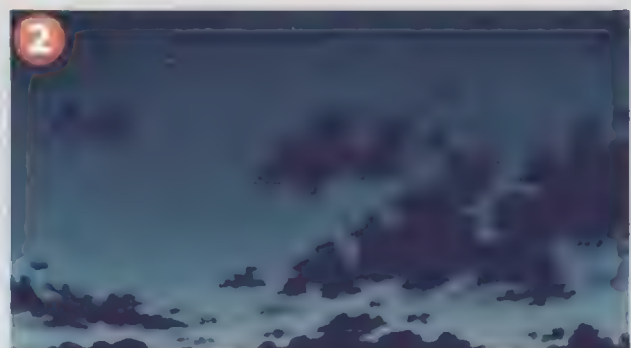


• Draw clouds similar to "Blue Sky and Clouds" (p.8).

First draw the cloud base layers (R25, G30, B80).



② Add thin clouds.





Make the cloud layer higher than the star. more clouds than stars is nearby, so avoid drawing the stars above the clouds. It's okay if the clouds are thin and the stars on the bottom layer are showing through. However, if the transparent star is large and stands out, it is better to make the star part a little thinner with a layer mask.

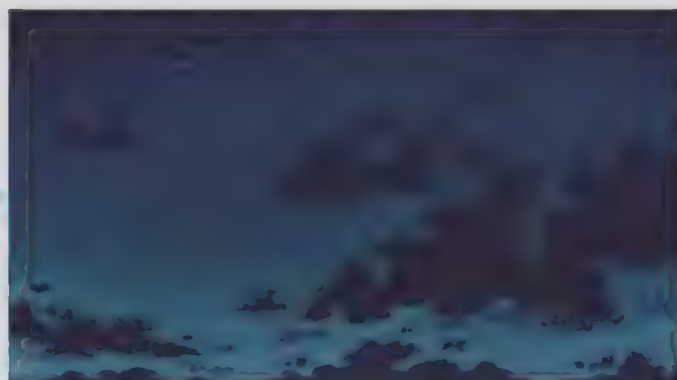
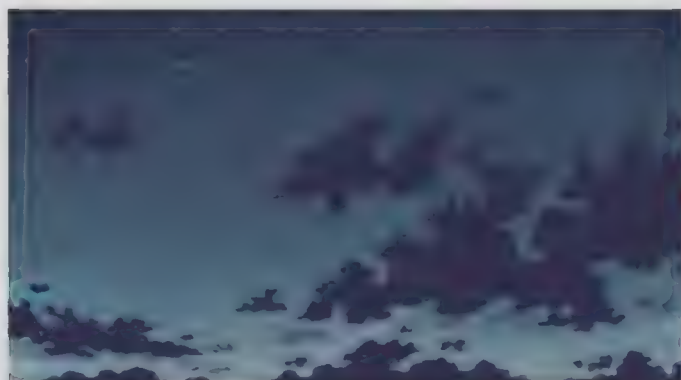


## 09

## adjust color

Adjust color with adjustment layers. Here we use [Hue/Saturation] and [Color Balance]. However, with various adjustment layers at the end, the Pandin

If you are only painting the sky, it is safer to adjust the gradation color of the sky or the color of the clouds themselves instead of using an adjustment layer.



## 10

## draw a full moon

- Create a layer and draw a circle in white.
- ② Duplicate the layer and select [Filter] from the menu. Blur with [Blur] → "Blur (Gaussian)". Duplicate the blurred layer and increase the bokeh.
- ③ the blurred layer and increase the bokeh.
- ④ Create a new layer. Select a blue color (R50, G50, B150) and make a circle with one click with a brush that is the largest bokeh and is slightly larger than the moon.

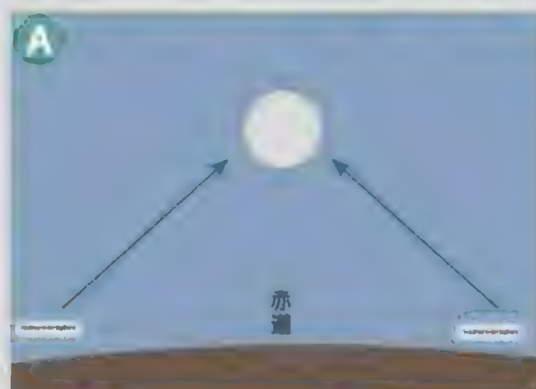
- draw the effect. The blending mode for this layer is [Clean] and set the [Opacity] to about 50%. ⑤ Duplicate the layer painted in blue, and enlarge it with [Edit] → [Free Transform] from the menu. This commentary extends beyond the screen of the figure.
- ⑥ Draw the moon surface. If the moon is small like the example, it is OK to complete it in the previous stage.



There is no need to draw craters on the moon if the size of the moon is about the size of the example, but there are some things to keep in mind when drawing a large moon and including craters.

The lunar surface has a dark area called the "sea" (not an ocean with actual water), and a bright area called the "highlands" where the reflectance is high. The "sea" is land formed by lava pooling in depressions. It looks dark because it is a black geological feature called basalt formed from lava. Also, the "ocean" has few craters, and the "highlands" have many craters. This is because the original crater in the "ocean" part was filled with lava. Be careful not to draw too many craters in the "sea".

By the way, the patterns of the "sea" and "highlands" on the moon appear to be reversed vertically and horizontally in the southern hemisphere. Similarly, in the northern hemisphere, the left side of the crescent moon is missing and the right side of the inverted crescent moon is missing, while in the southern hemisphere the right side of the crescent moon is missing and the left side of the 26th night is missing. This is because the northern hemisphere looks up at the southern sky, while the southern hemisphere looks up at the northern sky. In the southern hemisphere, the sun passes through the northern sky, so houses are built facing north.



When the full moon is out, the brightness makes it difficult to see the stars, so you may want to hide the star layer when drawing the full moon. However, I think it's okay to give priority to appearance to some extent in a picture, and I think there are orders for a picture in which the stars and the moon are drawn at the same time when drawing for work.

Nonetheless, if there are a lot of stars clearly drawn next to the moon, as in the NG example, it will feel strange (if there are only one or two, it can be said to be a planet, so there is no problem). . Therefore, when drawing the moon and stars at the same time, it is a good idea to at least erase the stars around the moon. Create a layer mask in the layer group that collects the star layers like . By erasing the moon in the center with a large bokeh brush, the stars disappear as you get closer to the moon.





# cloudy sky



There are two types of clouds with the word 'ran' in the 10 types of cloud shapes, and both are clouds that cause rain. One is "cumulonimbus" (p.12). The other is the most common type of cloud that brings rain, called a thundercloud, called a rain cloud. Here we draw a cloudy sky with

paintpoint

01

## Paint a cloudy sky with a brush

- For the clouds that spread across the sky, there is no problem if you only complete the gray gradation and the shades of the brush. If it's a nimbostratus that makes it rain, you'll need to draw more. The brush used here is also the Custom 'brush' brush (p.9). Lower the brush opacity and stroke horizontally to draw

Shades

- 2 The cloudy sky can be drawn in one sheet without separating layers. If you want to lighten a part, paint over white with a brush with [Decreased Opacity]. If you want to separate layers, I recommend creating a white background layer and a gray layer, then using the [Eraser Tool] to erase the gray layer to brighten it.

- 3 Up to this point, the shading of the clouds has been expressed to some extent, but I will draw more and emphasize it. If you draw areas where the clouds are thin and slightly bright, and areas where the clouds are thick and dark, you can create a more cloudy sky.



You can draw on a single layer, but here I use the method of adding more layers, drawing on them, and merging them as needed. With this, you can proceed with painting while checking the changes from the past state more than the number of times you can go back in the history by turning the layer on and off.



I think that there are many times when you rush in the wrong direction while drawing.

Drawing the details behind the shadows of the "Thunderhead" (p.14) Similarly, drawing too much can also be negative, so it is important to pull back and see the balance of the entire screen instead of drawing only in the enlarged state. is



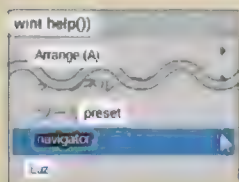
Sometimes it's good to pull out the screen to check, but if you want to work while always checking the whole, it's better to use the new window of [Navigator] or [Arrange].

## memo

## navigator

In the [Navigator], the range displayed in the window you are actually working on is displayed with a red frame.

will be



From the menu [Window] - [Navigator]

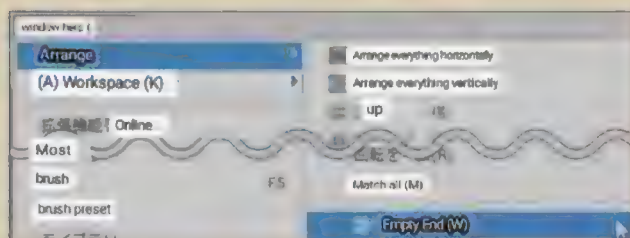


## memo

## [Arrange] New Window

There is also a way to use the new Arrange window as a Navigator. This is a function that displays another working window (document window) unlike [Navigator].

If you keep the entire screen visible, you can use it like a [Navigator]. Also, since it is a document window, you can draw directly in this window.



From the menu, select [Window] - [Arrange] [New Window for \*\*]





## 04

## shape distant clouds

I will continue to draw while arranging the clouds. By drawing the clouds in the distance so that the vertical interval between shading is shorter, they are compressed vertically to create a cloudy sky with a sense of perspective.

Conversely, the same interval is displayed at the top and bottom of the screen

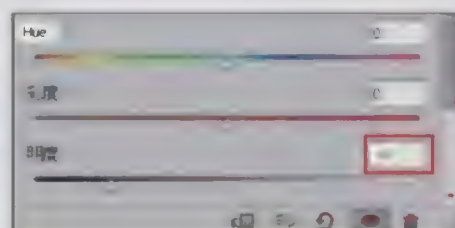
If you draw with , you can create a tilted cloudy sky looking straight up.



## 05

## adjust color

You can use the original color, but you can darken it by adjusting the [Hue/Saturation] of the adjustment layer to about "60" to make it look bad.



## 06

## draw torn clouds

If you want to draw more, draw a tear cloud at a lower position separately from the layered cloud.

Draw the torn clouds in the same way as the blue sky cloud base layer, but use a darker color instead of white. Konochigi It is better to draw the clouds on a separate layer so that they can be hidden or moved.



# Skillup Anti-pandering measures for gradation!

## 01 What is

banding? Banding is also called tone jump.

It's striped. Banding occurs when you strongly apply tonal correction such as [Level Correction] to areas with wide and smooth gradations, such as the sky.

Well, it's an unintended striped pattern, so you need to take measures.

For example, in the background of a game, a night difference is created so that a picture drawn as a daytime scene can also be used for a nighttime scene. When changing a picture from daytime to nighttime, an adjustment layer is added to change the brightness and color of the entire screen, but banding is more likely to occur at that time.

Four types of banding countermeasures are introduced here and on p.43.



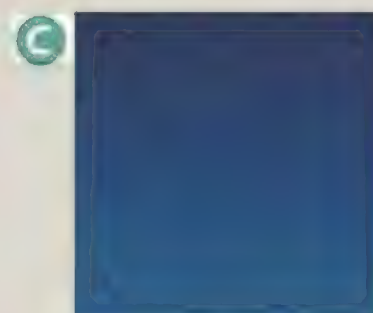
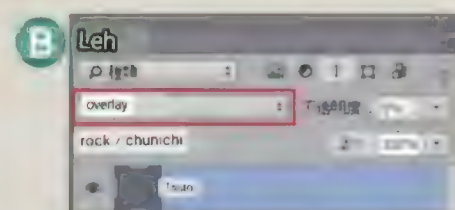
## 02 Countermeasures: Disperse with noise

I'll show you how to add noise with a filter to scatter the banding patterns of the panning.

If you add noise directly to a layer with banding, you will not be able to remove or adjust the noise, so prepare a noise layer.

Create a new layer and fill it with gray. from the menu Go to Filter > Noise > Add Noise and set the layer's blending mode to Overlay.

If the noise is too strong, you will notice the noise instead of the banding, so lower the [Opacity] of the noise layer so that both the banding and noise are less noticeable.



## 03 Solution 2: Apply a splash filter

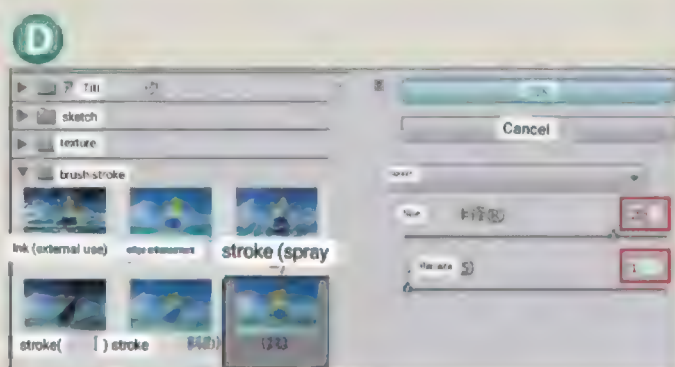
If you can reduce the smoothness of the gradation, banding will be less likely to occur, so you can also use the [Splash] filter in addition to [Noise].

First, duplicate the layer with banding.

Select [Filter] > [Filter Gallery]

> [Plush Stroke] > [Splash] from the menu to filter the duplicated layer.

Here, [Spray Radius] is set to "20" and [Smoothness] is set to "1", but in reality, check the result of applying and adjust the values and you're done.





# rain



Small raindrops are spherical due to surface tension, while large raindrops are shaped like buns due to air resistance. The size of raindrops is 0.5 to 6 mm in diameter. If it grows to a diameter of 6 mm or more, it will split during the fall.

Here, I will only explain how to draw rain. Please refer to each page for "Cloudy", "Sky", "Trees", "Mountain", etc.

## raindrop point

### 01 draw raindrops

Draw one raindrop. In order to express the afterimage of the fall, it is drawn as a vertical thin line instead of a

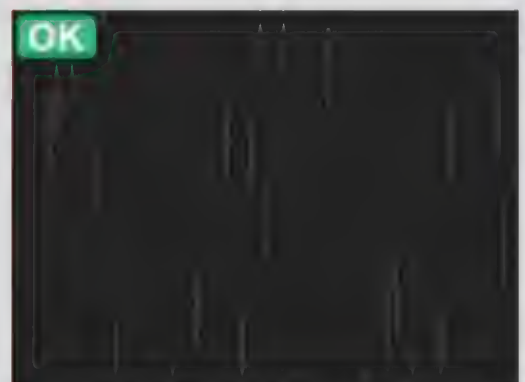
**A** spherical shape or a bun shape. You can draw using a brush that can be removed (p.50) like , or draw a circle like , lower the opacity [degree] and make it a large bokeh brush with the [Eraser [Tool]] You can also erase the top and bottom with .



### 02 duplicate raindrops

Duplicate and arrange the raindrops. Make sure that the raindrops are not aligned vertically and horizontally like the NG example

example



## memo How to duplicate layers

Press [Ctrl]+[Alt] ([command]+[option]) and the cursor will change as shown on the right. You can easily

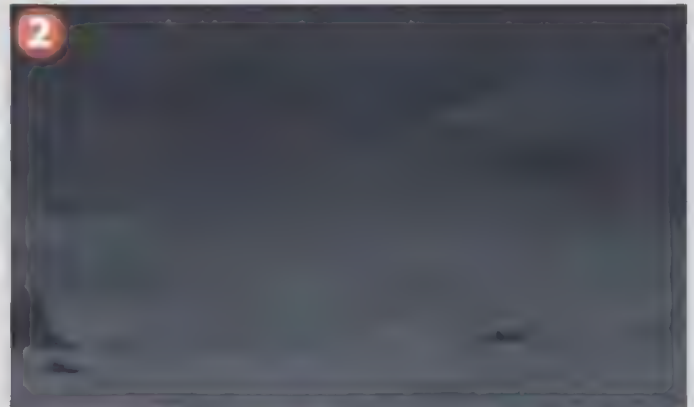
duplicate layers by dragging in this shape:



Set the [Opacity] of the raindrop layer created in step 1 to 25%

and place it on the sky background. This is the rain in the foreground.

In the case of tilting, the trajectory of the falling rain will be perspective, so use the [Free Transform] function to transform the top of the rain layer and widen the bottom.



3 Displays both near and far raindrop layers.



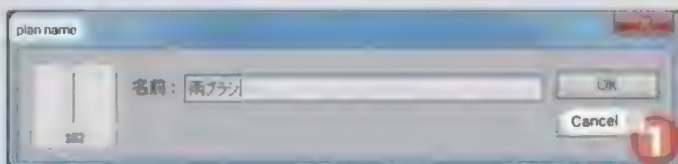
(2) Duplicate multiple layers of raindrops, reduce them, and line them up. This produces distant raindrops that are 景 denser than near-field rain. The background is lighter than the foreground, and the layer's [Opacity] is set to about 20%.

### heavy rain point

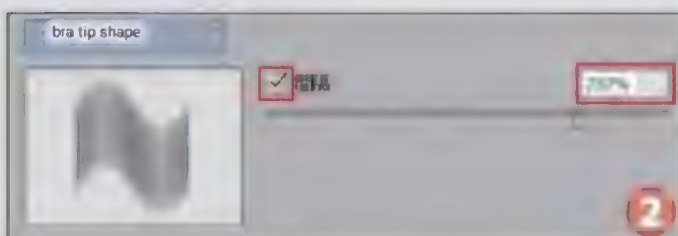
## Make a "rain" brush

In the case of heavy rain, the number of raindrops also increases and they become more noticeable. You can also draw by duplicating and increasing the rain up to 03, but here we will explain how to customize the brush and draw.

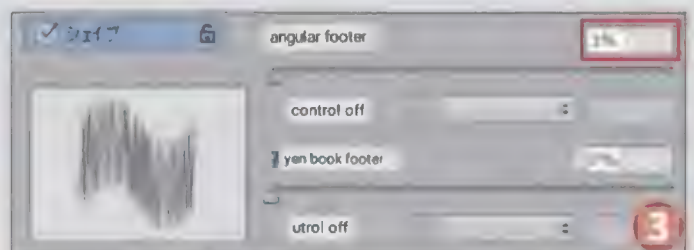
(1) First, register the vertical line of one raindrop in 01 to [Brush tip shape] (p.9).



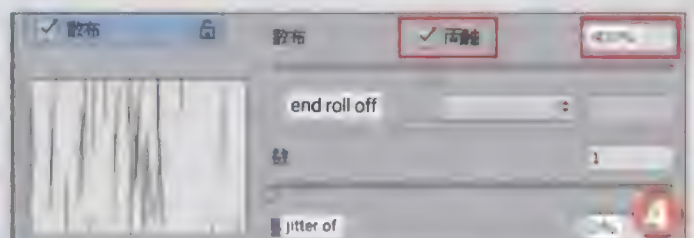
② Check the [Brush] window → [Brush tip shape] → [Gap] to widen the gap.



③ Set [Shape] > [Angle Jitter] to "1%". This allows you to make subtle angular changes instead of being all vertical.



④ Scatter the lines by setting Scatter to 400% and checking Both Axis. This gives you the same effect as working with 12 brush settings.

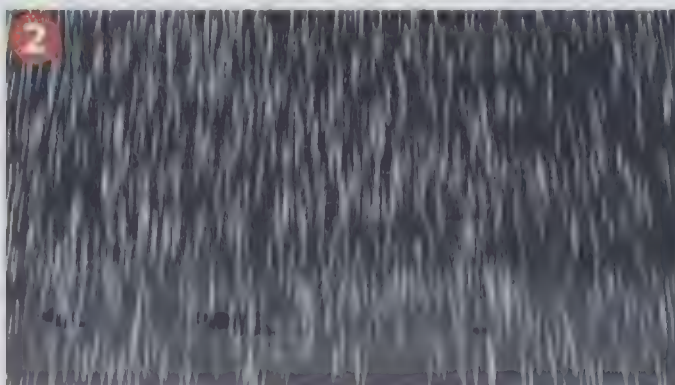




- 1 Paint the entire screen with the brush created in 04 to create the rain material.



- 2 Overlay the rain material on the background of the sky, and in the case of the Aori picture Transform it according to the perspective.



Basically, the procedure is the same as for

- 1 normal rain. Adjust the [Opacity] of the raindrop layer created in step 05 to "15%". Makes foreground rain darker than background rain.



- (3) Display both the foreground and background raindrop layers.



- 2 Duplicate and reduce the raindrop layer to create a distant raindrop layer and set the [Opacity] to about "5%".



In games, etc., rain is often drawn as a difference

after drawing sunny daytime. In such cases, adjust

with [Hue/Saturation] on the adjustment layer.

• It is a state where trees and mountains are placed in the daytime. The color matches the rainy sky

floating without

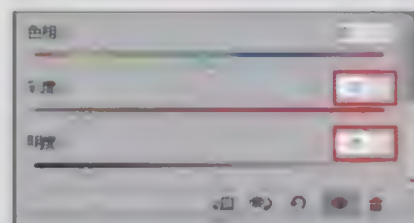
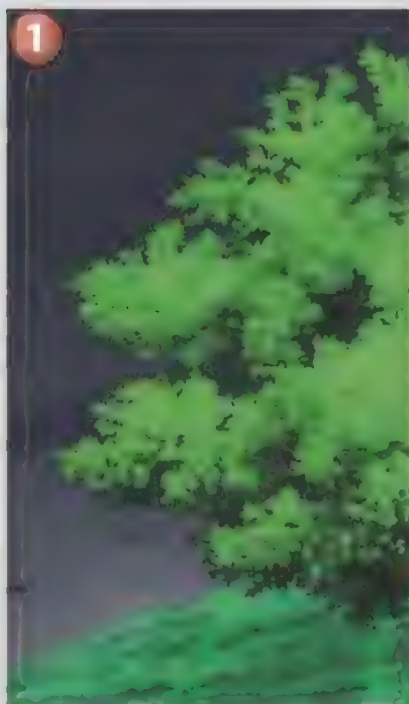
② From the menu, select [Layer] → [New Adjustment Layer] →

[Hue/Saturation] to create an adjustment layer, and set

[Saturation] and [Luminosity] to around "-70". Use a clipping mask to

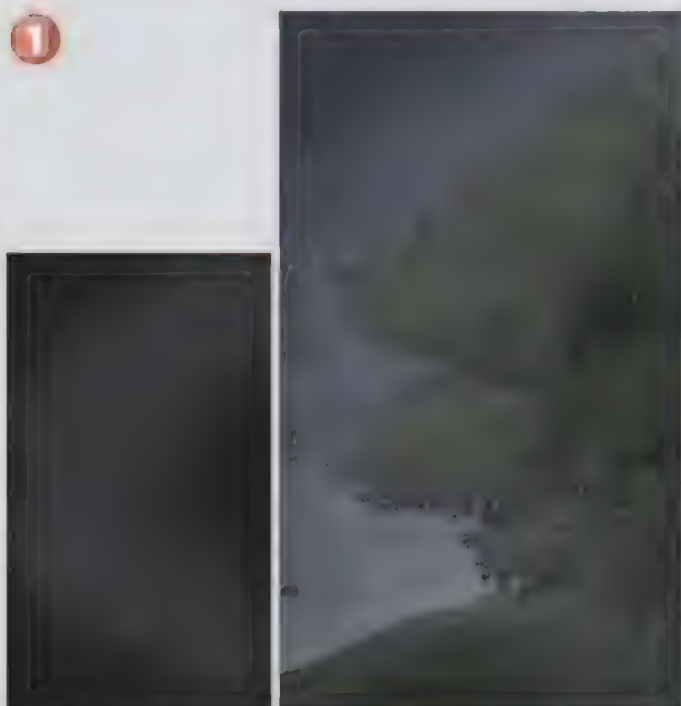
limit the effect of this adjustment layer to the

extent of the tree and mountain layers.

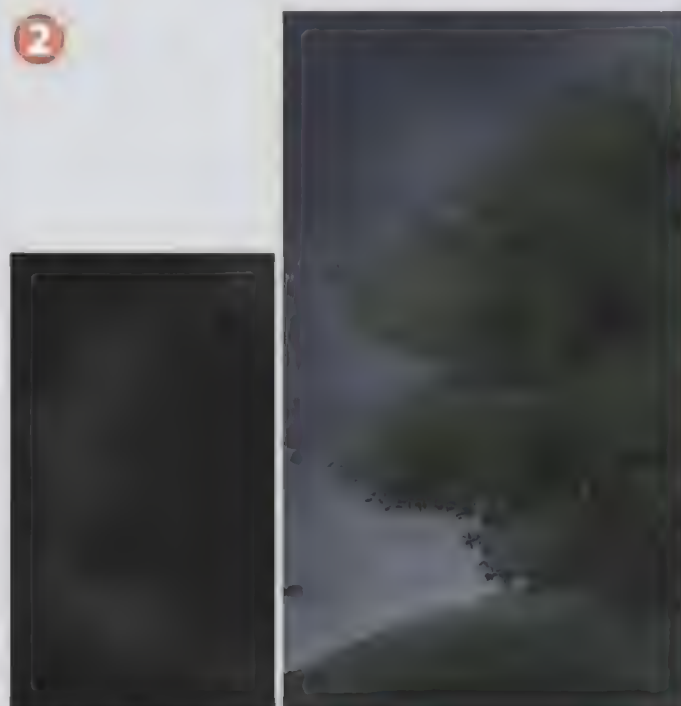


① Here we draw a ricocheting haze around the tree. First, create a new layer and use the large Poke-foot brush to paint the perimeter of the tree with white color. Set the [Opacity] of this layer to about 20%.

(2) Erase part of the image with a layer mask (p.91) or the [Eraser Tool] to adjust the amount of haze. Haze is needed not only for trees, but also for places where rain bounces off, such as the ground.



haze layer



haze layer



# universe



"I draw 'stars' and 'nebulae' in space. The color of stars changes with temperature. Stars with a relatively low temperature of about 3,000 degrees are red, stars with a temperature of about 6,000 degrees, such as the Sun, are yellow, and stars with a temperature of about 10,000 degrees are pale. There are reflection nebulae that reflect the light of the stars in the sky, emission nebulae that emit their own light, and dark nebulae that block the light of the stars behind them.

## paint:point

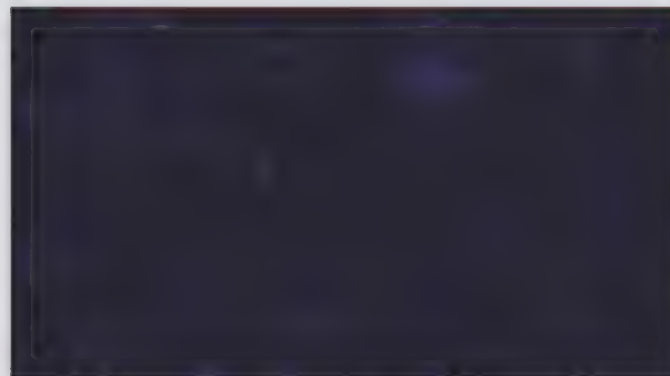
### 01 draw a star

This process is basically the same as how to draw stars explained in "Night Sky" (p.20). For the night sky, I used only blue for the bright stars, but here I also draw red stars.



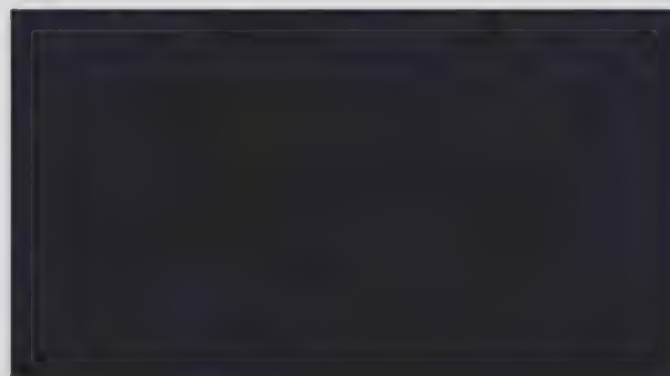
### 02 paint the nebula base

Hide the star drawn with 101 and paint the base layer with a darker blue. I will make adjustments in the process that follows, but here too, instead of using a single color, I will mix in a little green or purple, or add a contrast of blue. This process is painted in one layer.



### 03 emphasize dark areas

In addition to bright nebulae, there are also dark nebulae that block the light behind them and darken them. The greater the difference between light and dark, the better it will look in the end.

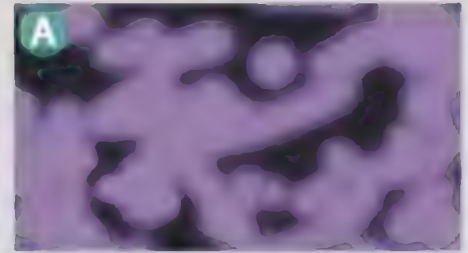


04

## emphasize bright spots

Create a new layer, set the layer's blending mode to [Overlay], and paint with a light purple color (R210, G150, B250). is the drawing mode of the layer.

This is a picture with the mode set back to [Normal]. It is properly painted like this.

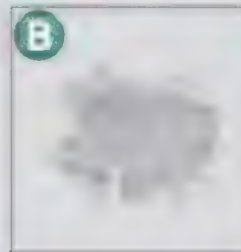


layer painted with light

05

## Make a "nebula" brush

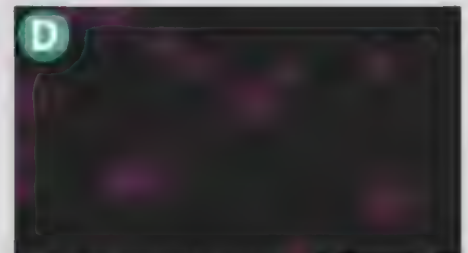
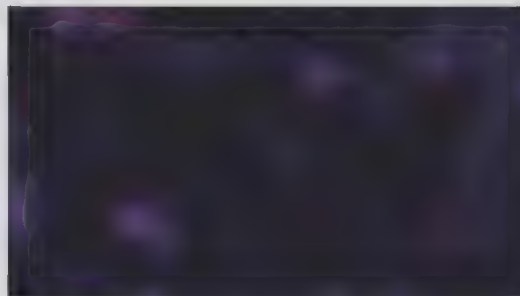
Make a brush for drawing the nebula. With a brush tip like B, set Shape > Scatter > Other > Control to Pressure. The [Opacity] of the brush is also set to "35%". Even if the brush tip and settings aren't exactly the same, it doesn't matter as long as you get a blurry finish like the one in the end.



06

## Paint purple with [Dodge Color]

Create a new layer, set the layer's blending mode to Dodge Color, and draw red (R235, G50, B170) in a ball shape.



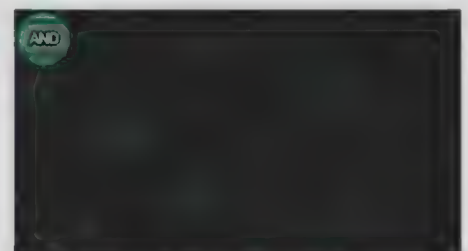
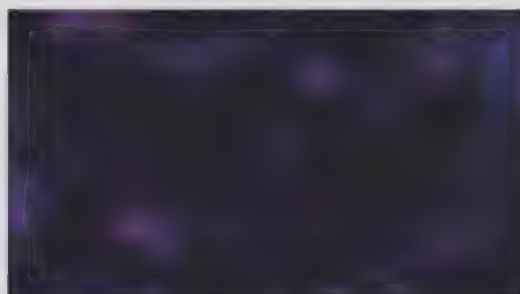
A layer in which red is drawn in a ball shape

07

## Paint bright blue with [Pinlight]

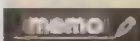
Create a new layer, set the blending mode of the layer to "Pin Light" and set the [Opacity] to "50%". "nebula"

Apply with a light blue color (R70 G185, B200) as if using a brush.



layer painted light blue





## Layer blending mode

I'm using the [Pinlight] blending mode here, but you can use other blending modes as long as they look the same. It can be difficult to understand initially what the effect of each blend mode is. You can get a feel for it by switching the blending mode many times and gaining experience.

[The drawing mode can be changed one after another with {Shift} + [+] or {-}. However, if you select the [Brush Tool], etc.,

mode will be switched. After selecting a drawing mode and closing the drop-down menu, until you touch the drawing screen, the area around the drawing mode menu will turn blue as shown in the figure, and it will be in a selected state, so press the [J] key in this state also change layers one after another by pressing (Windows only)



# 08

## Make the nebula stand out with Color Dodge

Create a new layer, set the blending mode to [Dodge Color] and paint as shown. is a picture with the drawing mode set back to [Normal] so that you can see the parts that have been painted. I painted it in gray as shown in , but by using [Color dodge], the brightness and saturation of the painted parts are increased, the nebula is brighter, and the whole picture is brighter.

The brush can be a regular large bokeh brush instead of the "nebula" brush. However, if the effect of [Color Dodge -] is too strong, you can paint with a lower [Opacity] of the brush. Alternately use the [Brush Tool] and the [Eraser Tool] with the [Opacity] lowered to paint while adjusting.



# 09

## Paint with yellow to show the range of colors

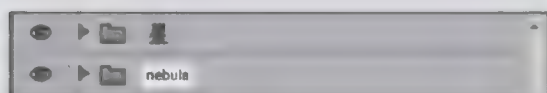
As a result of the process up to this point, the nebula has three main colors: blue, green, and purple. But the nebula isn't just in those three colors. There are still nebulae of various colors, but here we add a yellow nebula.



# 10

## put a star

01 Place the star layer group prepared in step on top of the nebula.



If there is a bright light on a dark screen, such as stars or obstacle lights (red lights on the roof of a building), you will see streaks of light in the photo. Diffraction of light produces these streaks, but the number of streaks varies depending on the shape of the aperture hole in the lens.

Since the light beams are perpendicular to each side of the hole, if the aperture hole is triangular like the sun, three intersecting light beams will appear in the image. In the case of a shape with an even number of sides, such as a square, the number of aperture holes is half the number of sides because the light beams on the parallel sides overlap.

例えば、口径8枚のレンズの場合、4

You can have a beam of light.

The shape of the aperture hole is not the only thing that affects the beam of light in a camera. SLR cameras have lens filters called cross filters. It is a filter that can intentionally express strong rays of light with linear grooves. By using this, you can change the number of light beams or emphasize the light beams regardless of the lens

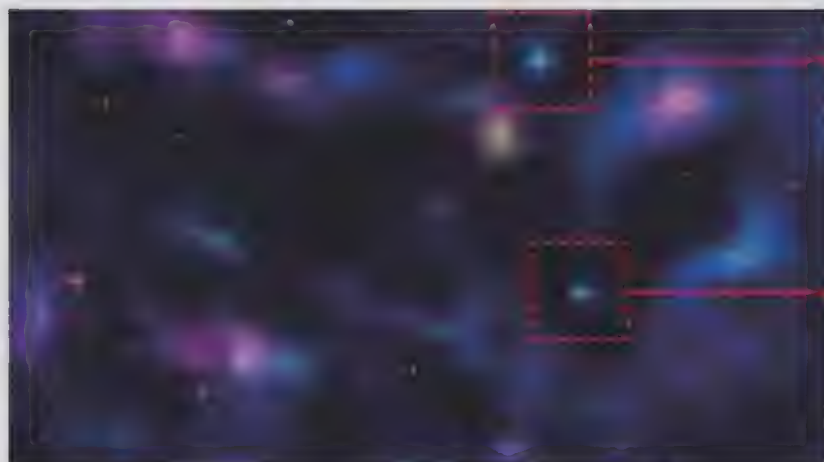
aperture



Rays are easy to appear in strong light, so draw only on particularly bright stars. Be careful not to add light beams to many stars because the picture will be noisy.

Instead of using a brush with a cross-shaped brush tip, it is better to draw the stars with dots and add light to specific stars on a separate layer.

On top of the original star, add 4 layers with a shape like this. A light that is slightly larger than the original star, a light that is one size larger, and two cross-shaped light beams. Set the blending mode of these layers to [Hard Light] and stack them to create the starlight.





# grassland



The grassy ground is used in various scenes such as parks, vacant lots and gardens.

If the grass is trimmed and managed like lawn, don't draw too much grass. The

grasslands are mainly planted with grasses.

The leaves of the Poaceae family are long narrow leaves with parallel veins,

The grass is also a gramineous family. Poaceous weeds include nutmeg, goosegrass, and bluegrass. child

Therefore, when drawing weeds other than gramineous plants, check the materials separately, paying attention to the fact that the shape of the leaves is different

You should.



parallel leaves

## paintpoint

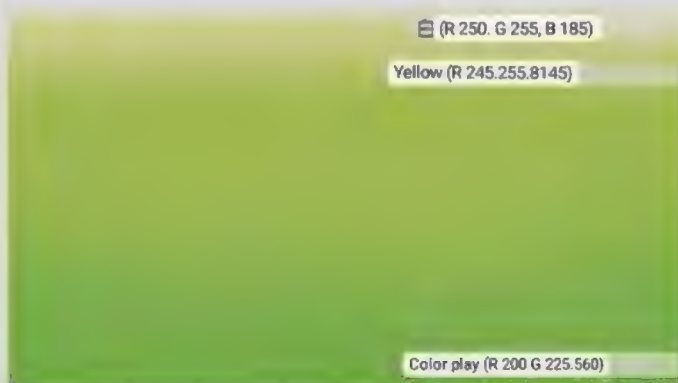
01

### draw a gradient

The upper part of the screen is slightly skipped white. If

you want to blow out green such as grass, add yellow in the

gradation between green and white to create a nice color.



### 02 Add unevenness to the grass

Use the "Custom brush" brush (p.9) to add light and shade to the grass.

put a la. Here we will not draw blades of grass yet, only

light and dark.



The light and dark in 2 are for the purpose of drawing the leaves.

There is another role outside. Even if

I say I draw blades of grass, I draw blades of grass at random.

is not drawn. Mainly in places with light and dark differences

Draw leaves.

For example, in the case of grass growing in front of a shrubbery, there is a difference in brightness between the 'color of the shrubbery', the 'color of the grass in the shade', and the 'color of the grass in the sun'. You can draw grass. However, in grasslands without shrubbery, there is no clear contrast between light and shade. Therefore, unevenness of light and darkness in the grassland by making it easier to draw leaves with different brightness

It is.



planted undergrowth



planted undergrowth



meadow grass



meadow grass

To thin the tip of the leaf "Brush that can be pulled out" (p.50) to draw.

① Draw two leaves facing in different directions. All Leaves if this curve is in the same direction, it will look unnatural.

② Add 1 leaf to make 3 leaves.

③ Add 3 leaves on the right side.

④ Add two leaves on the left side. The point here is to change the direction of the leaves, increase the number of leaves so that the grass intersects and overlaps appropriately, and make the center high and the edges slightly low.



Duplicating a single leaf cannot be used because the height of each leaf will be the same. again,

It is more natural for the tip of the leaf to droop a little due to gravity. It is better to draw in curved lines than in straight lines.



all leaves are the same length



leaves too straight





## 06

## Draw grass from dark to light

Continued from 102 enlargement. Based on steps 3, 4, and 5, draw darker grass from the darkened areas to the brighter areas.



bright spot

dark spot

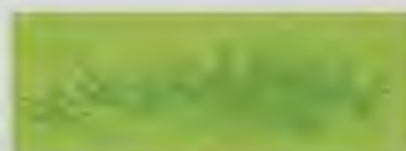


簡略図

## 07

## Draw grass from light to dark

This time, on the contrary, draw grass in bright colors from bright areas to dark areas.



簡略図

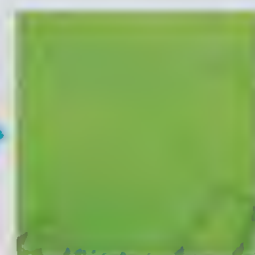
## 08

## finish the whole

It is completed by drawing the whole in the process of 06 07.



If the monochromatic areas are bothering you, create a layer with a rough texture (p.96) material and set the blending mode to [Multiply] or [Divide] to solve the problem. increase.



## COLUMN

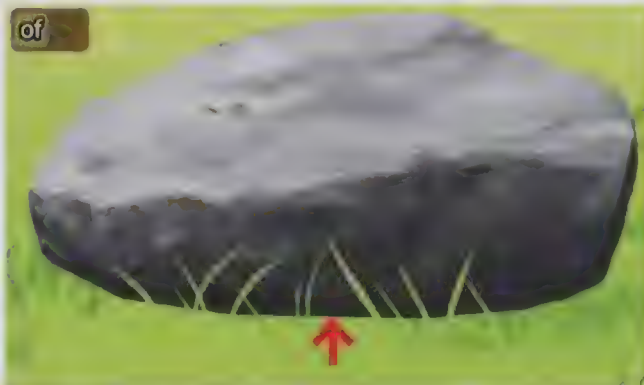
### Precautions when cutting grass

If the grassland is in contact with rocks, walls, etc.,  
be careful when The grass

in front of rocks, walls, etc. is empty.

If there is a gap, it is NG. contact as indicated by the arrow in the figure

Also, if the part is straight, there is grass growing there.



Because it will not be there and you will feel uncomfortable

viewer

Draw small grass etc. so that the straight part disappears  
is needed.



## COLUMN

### grass brush

So far, I have explained how to draw leaves one by one with a "brush that can be removed", but there is also a method of creating a grass brush and drawing. Create a Brush Tip similar to , and set the Shape and Scatter as follows:

[shape]

Size Jitter : 20% Control: pen pressure

angular jitter : 5% Control: off

Roundness Jitter : 20% Control pen pressure

Horizontal flip jitter: v

[spread]

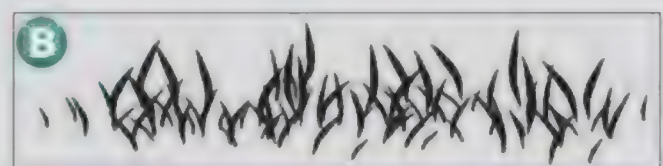
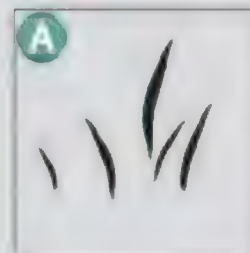
Spread: 60% Both axes: V Control pen pressure

© is an example of drawing horizontally with this brush.

If you use this grass brush to paint left and right, it will look like this. Up to this state, it can be painted in an instant, but in order to reach the state of completion, it is necessary to take some time to change the color and arrange it. Also,

I decided to paint only with a grass brush from beginning to end.

You don't have to be particular about it, so it's a good idea to use it together with a "brush that can be removed".





# ground



Here, we will draw ground that can be used in various situations such as mountain paths, parks, and shrines. The ground of the field is a darker color such as black soil, so it is different from the ground explained here.

## ground point

01

set the color of the ground

not that you can't always use copper, but it's

better not to use copper because it's just the idea

"ground → earth → brown". In my case, I often draw in colors such as low light powder color and pale yellow.

Of course, the color of the ground changes depending on the time of day and the weather, so we don't always use this color.

Please refer to it as the color of the ground.



red silver



Magnetic pink



light yellow

02

Draw the light and dark of the ground

- Apply horizontal strokes using the Custom Brush (p.9). As shown in the illustration, if you make the brush thinner and narrower as you go up, you can create a picture with depth. If you want a bird's-eye view, click the horizontal line

Make the thickness and spacing of the lines the same.

- (2) The color was too dark, so I adjusted the layer's [Opacity] to "50%" to make it lighter.

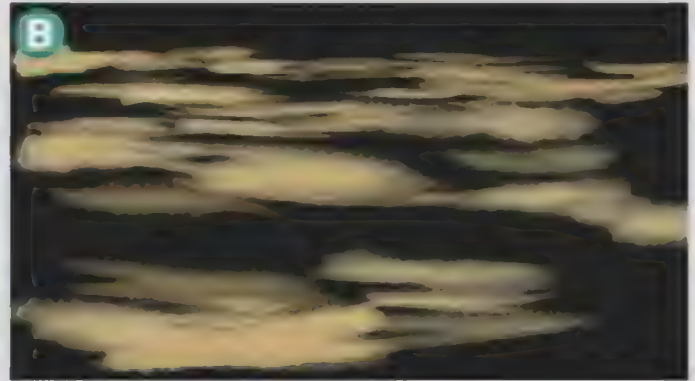


03

## Draw and prepare the ground

Draw in while preparing the ground from the previous process (upper side of the screen). Make the background black and see where you draw

It will look like when you scoop.



drawing face

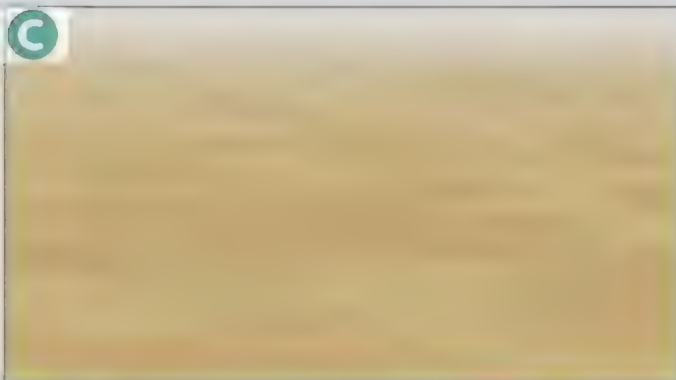
pebble.point

04

## Skip white and apply a rough texture

The top (back) of the screen is blown out in white. Then add a rough texture (p.96).

You can add texture by setting the layer's blending mode to [Multiply] or [Dividing].



05

## Make a "pebble" brush

The pebbles on the ground are drawn by creating a [Brush Tip Brush] like . The [Opacity] of the brush is set to "50%". You can draw slightly larger pebbles by drawing this brush horizontally.

By combining horizontal pebbles such as dot pebbles by clicking, various sizes are drawn as shown.





•First, draw the ground with a

slightly darker color. Use the pebble  
brush to make a few side strokes.

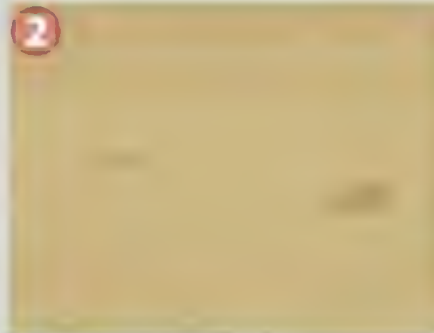
vinegar

2 By partially erasing and scraping with  
the [Eraser tool], the scraped part  
will be the lighted surface of the  
stone, and the rest will be the shadow part.

(3) Since the light hits the surface  
when it is erased and scraped,  
I sometimes finish with 2, but I  
add a bright color to emphasize  
the light surface.



draw pebble shadows



Scrape off the pebble shadow layer to  
create a bright side

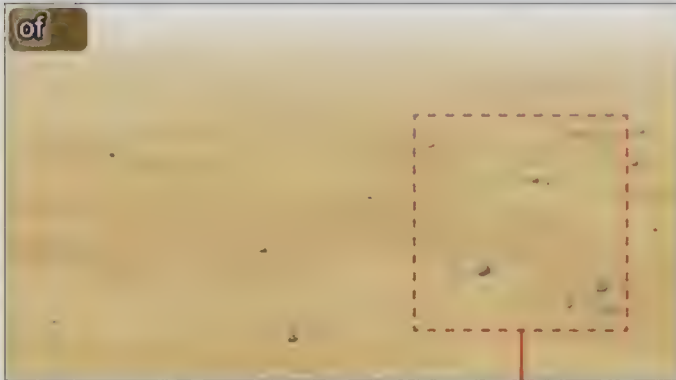


paint the light surface with a bright color

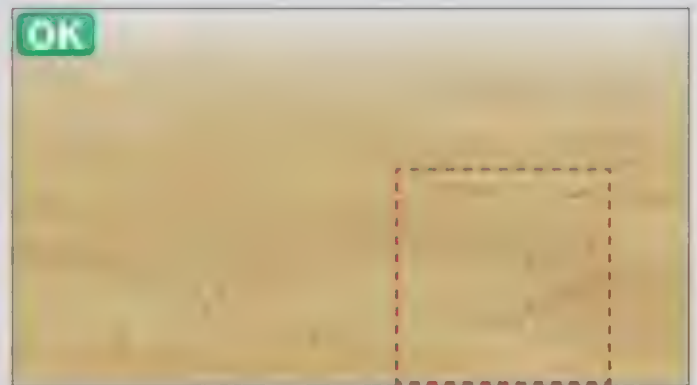
If you think that stones are gray and paint the pebbles  
in a different color from the ground, even if you  
carefully paint each pebble, when you look at it as a whole,  
only the stones stand out.

This does not mean that pebbles should not be drawn in gray.

It is a matter of balance with the color and brightness of the  
ground. Because the colors in the back and front are different  
due to factors such as aerial perspective, the pebbles tend to stand out  
when added later.



A stone with a different color than the ground



stone of the same color as the ground



# Skillup Anti-panding measures for gradation 2

## 04 Countermeasure 3: Merge with 16-bit gradation

Unlike Solution 12 (p.27), this method does not use filters. The method is to convert the gradation of the completed image to 16bit, integrate the image, and then convert it back to 8bit.

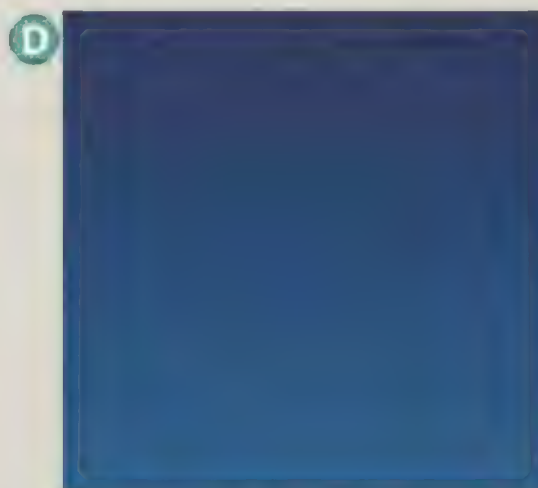
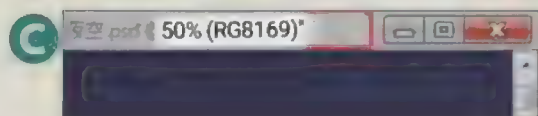
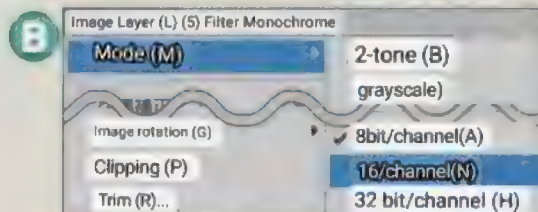
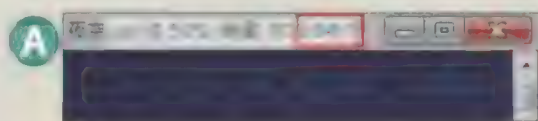
8bit is 2 to the 8th power, so 256 gradations. 16bit is 2 to the 16th power, so 65536 gradations. 16bit can use an overwhelmingly wider gradation. However, since the data becomes heavy and some software cannot use 16bit, 8bit is basically used. Banding vs like this

Temporarily set it to 16bit when doing a workaround. The number at the edge of the letter written in the window of the image

When the character is 8, it is

**B** 8bit. From the menu [Image] → [Mode] → Select [16bit/channel] for 16bit. After integrating the images in this 16bit state, 8bit again, and you're done.

The 16-bit integration described here is the most recommended method, but if software other than Photoshop does not support 16-bit, methods 1 and 2 will be useful. Also, if banding remains even after integration in 16bit, it is possible to use it in combination with countermeasures such as adding noise after converting to 16bit and then integrating.



## 05 Measure 4: Add irreversible fixes

I think that measures 1 to 3 can be basically handled, but I will explain what to do if all else fails. First, banding tends to occur when using many filters such as — adjustment layers, so the fundamental solution is to reduce the number of adjustment layers.

However, if it is possible, I think that I have already done it, so as a last resort, I will use an irreversible correction method.

I will take it. I merge all the layers and use the [Fingertip tool] to blend in only the areas where the banding is noticeable, or lower the [Opacity] with a large poke brush and paint from above to blend in. This should only be used for fine-tuning, as it will have to be redone if corrections occur elsewhere.



# rock



The shapes of rocks vary from rugged rocks found upstream in rivers to rounded rocks common downstream, but by learning how to paint the corners like 65, you will be able to draw both. And if you can draw rocks, you can draw wilderness and cliffs in the same way.

Here the rocks are drawn in gray, but depending on the scene, they may be drawn in yellow or reddish colors.

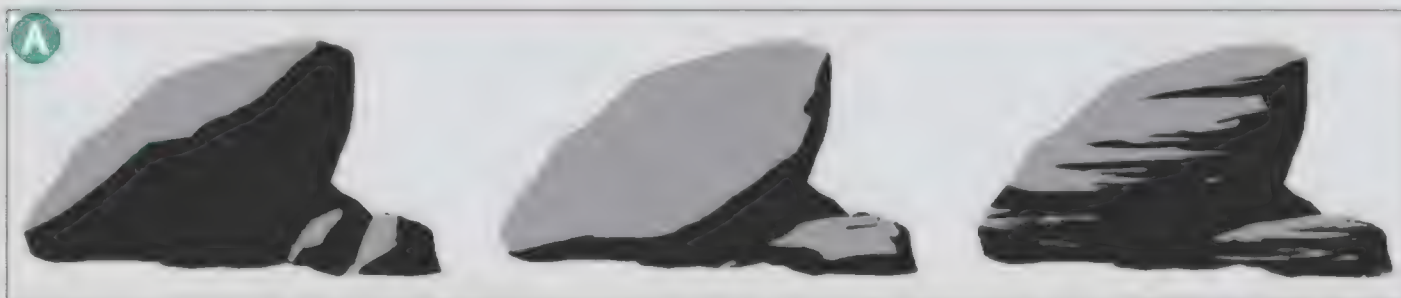
## paint point

01

### Apply base layer and shade

1 Create a base layer by imagining the shape of a rock.

(2) Create a new layer and paint shadows.



Even if the base layer is the same, you can change the shape of the rock depending on how you apply it, so decide the shape before proceeding.

02

### choose a brush

I don't use big brushes with bokeh when drawing rocks. The hardness of the rock does not come out and it becomes blurry.



If the bokeh is small, you can draw the rock surface by carefully layering with a hard circle brush, but if you apply it quickly, the round marks will stand out.

If you use the same "custom brush" brush (p.9) that you used to paint the clouds in "Blue sky and clouds", you can paint without noticeable marks



### 03 Draw rock texture with brush

Setting RGB to the same value, such as R170, G170, and B170, will result in an achromatic color. Here we paint the rock face with neutral gray.

Using the "custom brush" brush, you can create a rock-like texture simply by painting the bright side with 190 brighter than RGB170 or 120 darker, and the dark side with 110 brighter than RGB50 or 30 darker.



\* The number 170 means the color of R170 G170, B170.

### 04 increase contrast

Contrast can be strengthened by increasing the numerical difference, such as RGB 170 for the bright side and RGB 50 for the dark side. Depending on the weather and shadows, the difference in brightness and darkness may decrease, but basically, the picture will look better if there is a difference in brightness between the bright and dark sides.

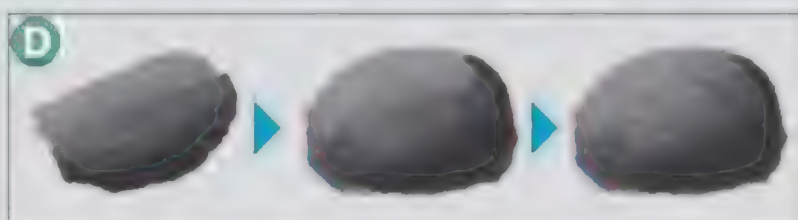
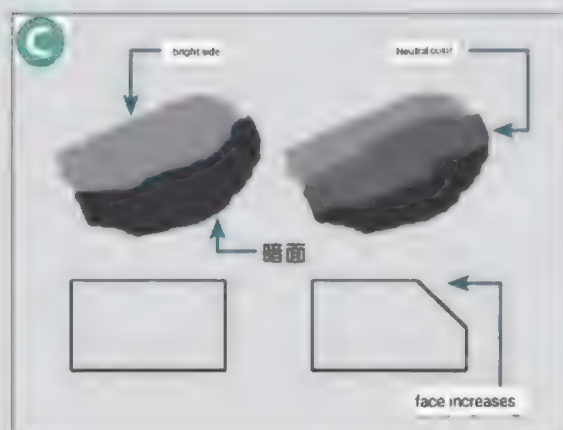


Rocks in the shadows have darker light surfaces and less difference between light and dark

### 05 Scrape the corners to increase the number of faces

If you use only two colors, the corners will be curved at right angles, but you can increase the number of surfaces by painting the area between the light and dark surfaces with a neutral color.

Furthermore, if you increase the number of faces repeatedly, it will become smooth and rounded rocks with rounded corners





06

## draw a slanted surface in a wide flat surface

In addition to sharpening the corners to increase the number of faces, you can express the territory in a wide flat surface by sandwiching diagonal dark faces between bright faces.



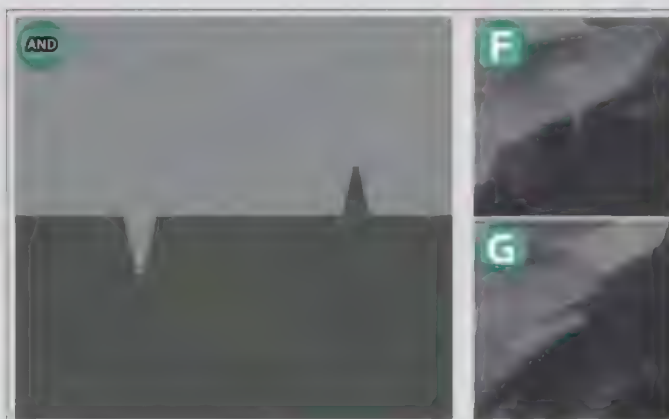
07

## draw chips and cracks

Simplifying the surface of a rock, we can think of it as having a bright side and a dark side. By letting the color of one of the faces protrude into the color of the other, you can draw a state where the corner is missing.

The dark side is the side not hit by the light, but it has chipped corners. When you pull it off, it creates a small surface that the light hits.

Conversely, if the bright side is missing, that part will not receive the light. It becomes darker because it becomes darker.



08

## paint the whole

Paint the rocks with the content from 102 to 7 in mind.

- Use the "Custom brush" brush and apply thin layers such as "50%" or "80%" to the [Opacity] of the brush. If it's a rock in the distance, it's okay to finish painting roughly like this.



2 Use the [Eyedropper tool] to apply and blend in the

color. However, if you only use the [Eyedropper tool],

the colors are limited, so if you want to add

some color to the rock, select a color from the [Color picker] or [Color] window and set the [Opacity] to 20%."

and so on to add color. Here, I added a slightly

greenish color to the shadows.



3 If you work only by looking at the details, you may find that

the corners have been removed and become too smooth, like the round

rock mentioned above. In that case, overpaint the shaded areas

with a darker color and adjust to emphasize the difference in the

surface.



09

## draw a reflection

H is an illustration of reflected light often

found in drawing books. The right edge opposite the

light source is bright with reflected light. Draw this

reflection on the rock as well.

Reflected light is affected by the color of

the reflecting object. There is often grass around the

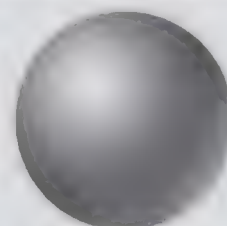
rocks, so I used grass green to reflect the light.



H



no reflected light



with reflected light



# trees



Here, we will explain a general method that can be applied to draw various kinds of trees without specifying the tree species in particular

Typical street trees include zelkova, tulip tree, camphor tree, trident maple, ginkgo biloba, and cherry tree. These trees have different characteristics in terms of tree shape and bark, so if you have already decided on the type of tree, it would be a good idea to collect materials and incorporate the characteristics into your drawing.

## branch and trunk points

01

### shift the position of the branch

Branching is important to make it look like a tree branch. Stagger the positions without branching all at the same time. Instead of branching at the same time as in the case of two branched

branches, one of them has one break.

■ is the part where it branches off. like this

If the branching is made so that one of the branches is closed once, the number of branches (dotted line) will be the Fibonacci number.



Simultaneous branches

A technique that shifts the branches

## memo

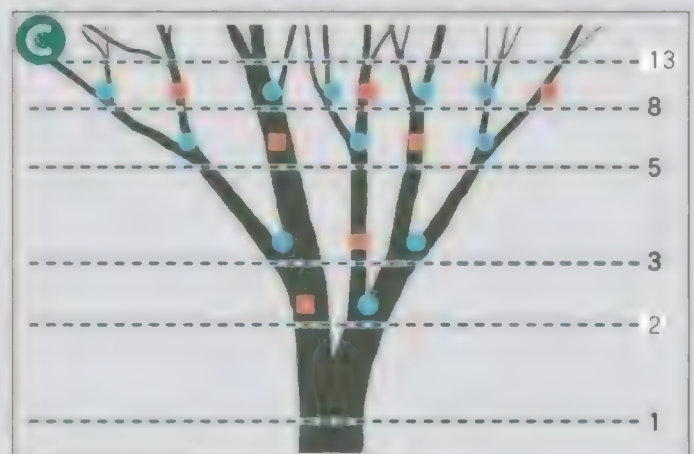
### What are Fibonacci numbers

The Fibonacci sequence is a series of numbers with the rule that each number is the sum of the number one before and the number two before.

Fibonacci sequence 1, 1, 2, 3, 5, 8, 13, 21, 34, ...

The numbers in this sequence are called Fibonacci numbers. Fibonacci numbers such as 5, 8, and 13 are often seen in natural objects such as the number of petals and the number of scales on a pine cone.

is drawn so that it branches at exactly the same height, but when you actually draw it, you don't have to match it exactly. To begin with, there are branches that are slanted diagonally, so even if the branches are of the same length, they will not be of the same height. You don't have to count each Fibonacci number, but if you don't know how to draw the branches, or if it looks strangely too regular, you can refer to it.



Fibonacci number branching

## 02

## cross the branches

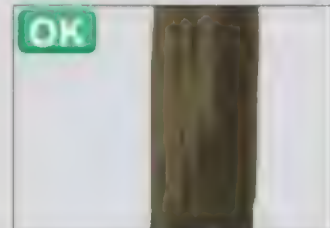
By intersecting branches, the anteroposterior relationship between branches can be displayed. However, if you are not conscious of it, you tend to draw all the techniques without intersecting them like in the NG example. The point is to intentionally overlap.



## 03

## Choosing a brush to apply the bark

Here we use the "Custom Brush" brush (p.9). It is better not to use a brush like the default hard circle brush, which tends to leave circular, rounded traces, as it will look like an NG example.

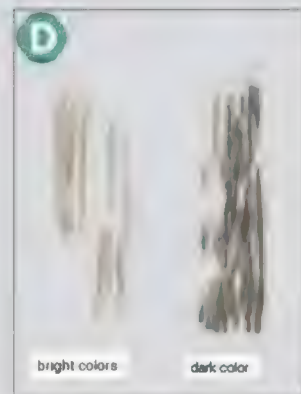


## 04

## paint the bark

Lower the [Opacity] of the brush to about 70%, and use the [Spot [Spot tool] to draw the bark vertically as if picking up the color to draw the bark to the state of 6. In the case of distant trees, do not draw as much as the base layer

- (R120, G105, B60) with a shaded color (R60, G50, B25) You can create a difference in perspective by finishing at the stage of lightly painting.



## 05

## Darken the trunk and branches to blend in with the darkness of the back leaves

Light is blocked by leaves on the upper part of the trunk and branches. So darken the upper part of the trunk and branches to make it harmonious. Add bokeh to the layer with the [Opacity] lowered and blending mode set to [Multiply].

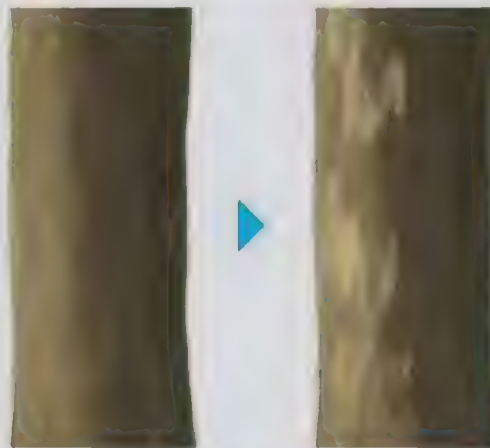
Apply with a large brush to gently darken. If it is not darkened like this, the trunk and branches will stand out because they are too bright against the darkness of the back leaves.





Paint the sunbeams with a color lighter than the color of the trunk. Adding sunbeams through the leaves creates a difference in brightness and makes the image look

before



I draw reflections on the trunk of the tree in the same way as the 4th rock (p.47).

The painting method is the same as when painting the bark in 4, but the paint color uses the color of the reflective object. There are often other trees around the trunk, so here I painted the reflection with the color of the leaves.

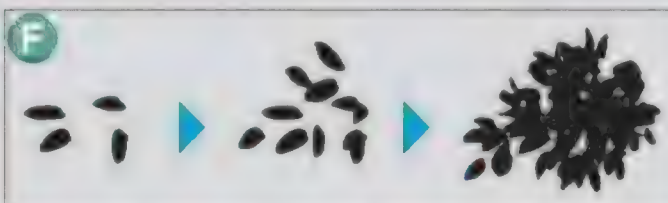


### Leaf painting point

Lightly draw dots with a brush that can be removed to create a leaf-like shape. By increasing this shape, you can make a leaf. Moderate without filling between leaves. The point is to draw with a space between.

In addition, by drawing this leaf mass, you can create a leaf base layer.

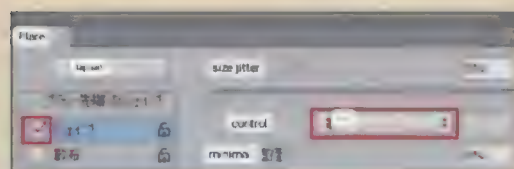
塊



### memo Pouch that can be removed

A drawable brush is a brush that tapers with changes in pen pressure. If you set the [Brush] window - [Shape] > [Size Jitter] > [Control] to [Pressure], it will be a brush that can be punched out. In this book, I use a hard circle brush with [Control] set to [Pressure] as a brush that can be punched out.

Furthermore, in the case of Windows, if you set the pen tip feel to [Hard], which can be set in [Tablet Properties] in the Control Panel, the drawing will be smoother.



Details on how to draw leaves are given in "Shrubs" (p.52). Here, I will explain from the point where I have finished drawing the entire leaf using that drawing method

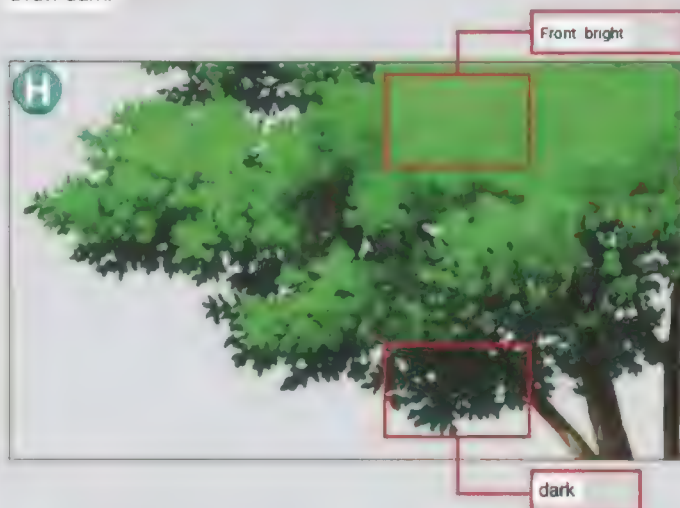
The problem that the overall color and brightness are too uniform  
Brighten the light source side to mitigate. good from the start



It's fine if it's well painted, but if you want to adjust it later, create a new layer, set the layer's blending mode to [Overlay], and paint with a lighter color such as yellowish green. In addition, I filled in the shadows of the clumps of leaves near the brightened area to reduce the shadows a little.



For the leaves, the "front leaves" are bright, and the "back leaves" are Draw dark.



Separate leaf layers for front and back

Trees can be changed by difference, such as autumnal leaves and deciduous. In such cases, it is convenient to put the trunk and leaves on separate layers. However, when the leaves are drawn on a single layer, the problem that the trunk is in the foreground rather than the "foreground leaves", and conversely, the problem that the trunk is in the back rather than the "back leaves" occurs. .

There are two ways to resolve this. Another method is to separate the leaves in the background and the leaves in the foreground into separate layers and sandwich the trunk layer between them. It's a way to turn it off. Align the stem and leaves using either method.



Hide unnecessary parts of the trunk and branches with a layer mask





Shrubs are trees with a height of 30 cm or more and less than 1 m when planted. Along with tall trees, it is a background object that is often drawn in various scenes such as forests, parks, gardens, schools, and roadside trees.

Representative shrubs include azalea, syringa, abelia, gardenia, and tobera. As with "Trees" (p.48), here I will explain how to draw general shrubs without specifying a particular tree species.

## paint point

### 01 Draw the leaf base layer

(1) Draw a cluster of leaves in the same way as 08 (p.50) of "Tree".

(2) Make the brush size a little smaller and draw more. I draw to fill in the gaps more than when I did the "trees".

(3) Based on how to draw so far, draw a bun shape with green (R84, G140, B93). Let this be the base layer for the shrub.



### 02 Draw with the point-to-point drawing method

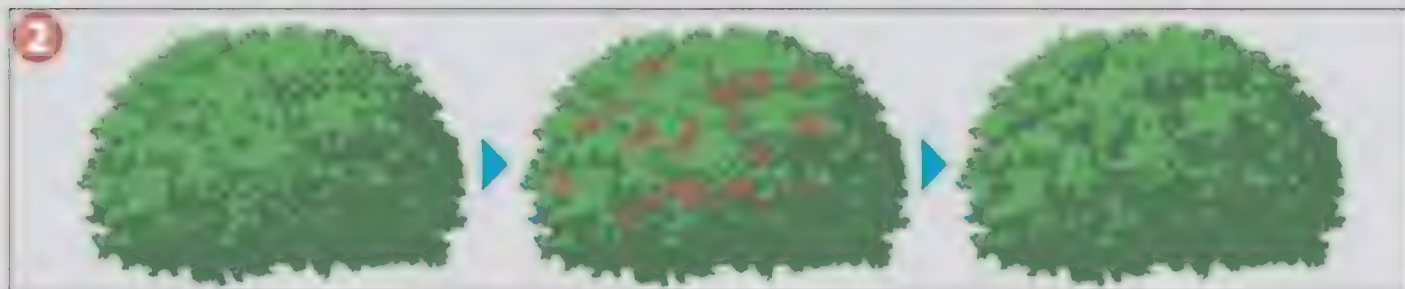
(1) In the point-bond drawing method, first draw a lot of dots in bright green (R113, G220, B105). This point is drawn in "Brush that can be punched out" (p.50). Draw from the light source side, do not fill in the shadow side on the lower right side

Stop drawing dots with degrees. It will not work as it is, so I will paint by connecting the dots of the leaves that are arranged in a regular pattern. In the figure, the painted area is shown in translucent red.



② This time, to erase the unnecessary leaf dots, paint over the shadow color from above. In this way, the illuminated

By creating a spot and a shadowed spot, the initial discomfort disappears.



### 03 Adjust by increasing shades

• For a distant view, there is no problem with this rough shade, but when it comes to the mid-to-close view, the coloring feels hard or too simple.

② With a slightly brighter color than the first shade I will paint.

③ Paint near the ground with a color darker than the first shadow color. In addition, paint the shadow side with a bluish color to increase the color or even out the overall paint.



### COLUMN

### draw deformed leaves

Even if you try to draw all the leaves side by side, it will not look good. Some deformation is required.

Before considering the deformation of the leaves, let's consider the deformation of the hair. For example, if you paint the hair of a character with afro hair like an anime cel, it will look like •. This is a method of drawing the hair as a lump instead of drawing each hair in detail.

When drawing leaves, it works well if you deform them in the same way. I actually used a shrub base layer for my hair.

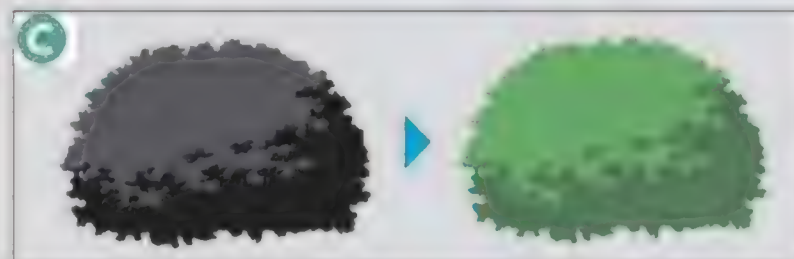
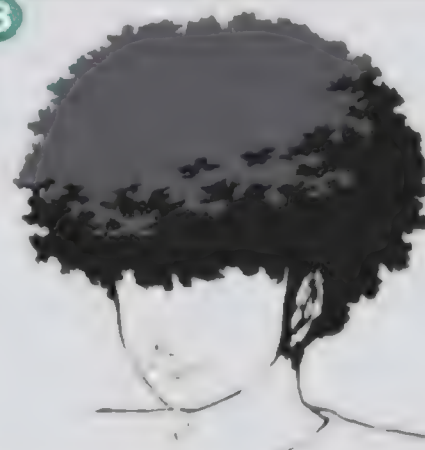
③ If you change it to green like , it will only look like a shrub. Both hair and hair can be deformed in the same way.

The 102 point-connecting drawing method connects the dots of the leaves, making it easy for people who are not accustomed to drawing such deformations to draw. It's a messed up method.

### THE



### B

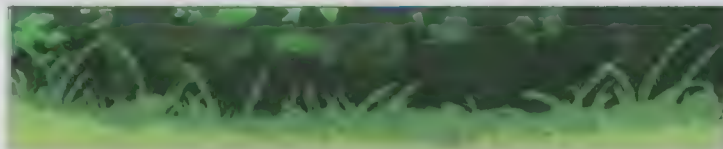
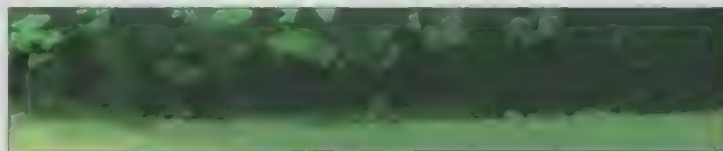




04

draw undergrowth

If you are drawing shrubs on top of grass, use a brush that can pull out the grass.

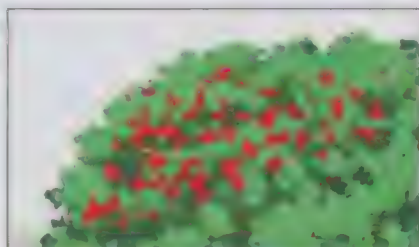


05

draw the bright part

Draw the bright parts. Again, use the point-to-point drawing method. The color is red for illustration purposes, but in reality you will paint it bright green like the eyes.

D



AND



06

Add and adjust leaves

It doesn't matter if the outline of the distant view is just bumpy and doesn't look like a leaf, but if it's a little closer, add it so that it looks like a leaf.

Also, like in 102, I drew the bright leaf dots in the dark shaded areas, but in 3, I overwrote them with dark colors, so I added the bright leaves again.

F

add leaves to outline



G

Draw partially light colored leaves in the dark areas of the shadows

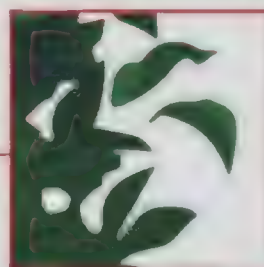


## 07

## Draw the shrubs in the foreground

For the distant shrubs, I drew the leaves as clumps, but if I wanted to express the nearby shrubs, I would draw the leaves solidly. Details on how to draw leaves are given in "Leaves" (p.56), but when drawing multiple leaves like this, be careful not to draw them all in the same direction. increase the

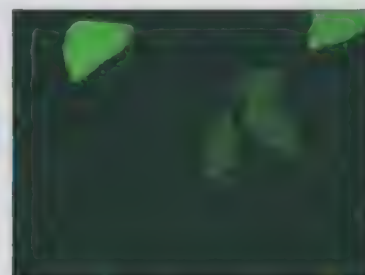
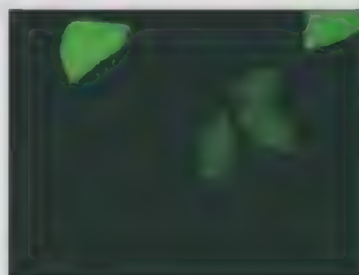
Here, we explain the general drawing without specifying the tree species, but some tree species have small leaves. In that case, even in the foreground, I don't draw the shape of the leaves properly, but draw them deformed as clusters.



## 08

## Add a thin texture with a rough texture

The shadows are mostly monochromatic, but if they were completely monochromatic, they would look flat, so I lightly added a texture (p.96) to create a rough texture.



## 09

## Make it look like a close-up by adding a difference between light and dark

It is also important to create a contrast between the light and dark, rather than the distant view.



Low speed and low brightness



Close relatives: High saturation and large brightness difference



# 葉



Foliage is a compulsory item that is often used in backgrounds, such as trees for outdoor backgrounds and foliage plants for indoor

backgrounds

The shape of the leaves varies greatly depending on the type of plant, but in the example, I avoided ginkgo and maple, which have characteristic shapes, and used oval leaves with reticulate veins that can be used as general-purpose leaves. I will explain how to draw.

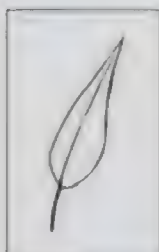
## leaf point

01

### leaf shape

How to

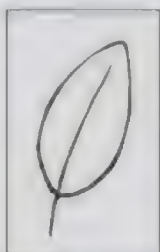
The shape of the leaf blade is various as shown in the figure below. In addition to the shapes listed here, there are many other types of , such as circular, needle-shaped, obcentric, and obovate. If you are drawing with a specific plant in mind, use the shape of the leaf blade of that plant.



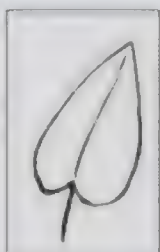
lanceolate



plum circle



Oval



heart-shaped

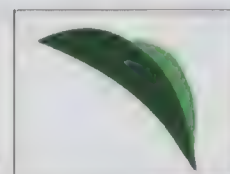
02

### How to draw two types of leaf blades

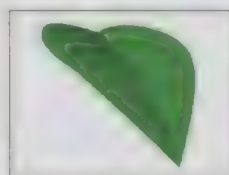
First, let's learn how to draw two types of "front leaf blade" and "lateral leaf blade". There are variations depending on the angle, but basically, if you draw these two types, you can handle them.



front leaf blade



horizontal leaf blade



Variant of the front  
"slightly oblique leaf blade"



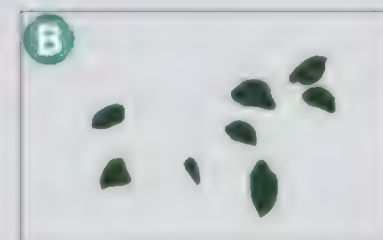
Lateral variation  
"Lateral leaf blade"

03

### Deform the leaf blade

Deforms and draws according to the distance on the screen. If it is a long distance, there is no problem even if it is deformed to a triangular shape like the one on the far right. In this form

You can draw dots continuously with a "brush that can be cut out" (p.50) like a brush.



Sideways leaves are in the front and "back leaf blades" in the back. It consists of the "upper leaf blade".

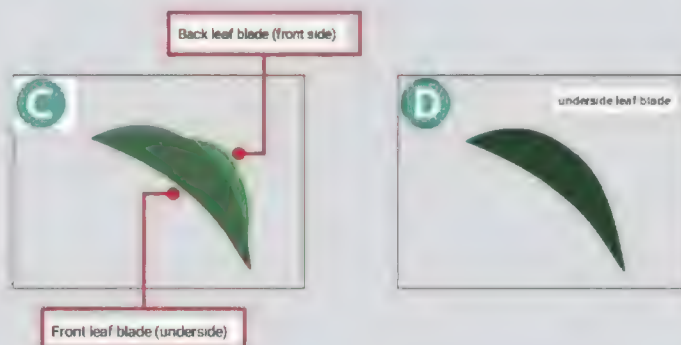
First, let's consider only the "backside leaf blade" in the foreground. Yo. It is the same crescent shape as the lateral leaf blade, which seems to be only the "back side leaf blade". If it's just this, it's a simple shape, so it shouldn't be difficult to draw.

Next, draw the "front leaf blade" in the back. It is also crescent shaped. In this way, the sideways leaf blade is a crescent moon.

You can draw by combining two types.

When drawing the leaf blade in the back, do not try to draw only the part that is visible. easier.

If you can't draw the back leaf blades well, try duplicating the front leaf blade layer, brightening the color, transforming it by shrinking and rotating it, and superimposing it.



While it may seem that you need to know more patterns to draw leaf blades in different orientations, you can increase the variation in angles by making small changes, as explained below. Therefore, it is generally possible to handle only two basic types.

Changes in forward and backward directions depending on the position of the petiole

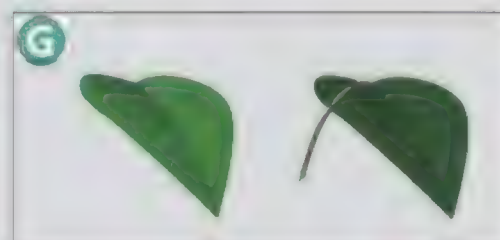
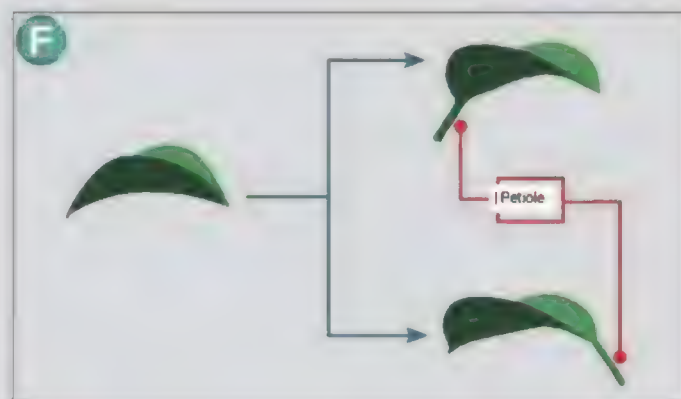
By changing

**F** the position of the petiole, you can change whether the tip of the leaf faces forward or backward.

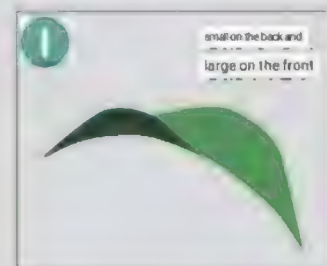
Similarly, by changing the color of the leaf blade and drawing the petiole in front, you can change the "front-facing leaf" to the "rear-facing leaf".

Change in angle due to the size of the back and front

A "horizontal leaf blade" has more of the underside and less of the front side. By reversing the proportions of this appearance, making the back side smaller and the front side larger, you can change the angle closer to the front.



close to sideways



get closer to the front



## 06

## paint leaf blades

When drawing a leaf from a distance,  
one leaf is often drawn in a single color.

The number of colors will increase because you will be drawing dark and dark areas.

When painting leaf blades, lower the [Opacity] of the brush.  
For the brush, use the "Custom brush" brush (p.9). While picking up  
colors from the painting I'm painting with the eyedropper  
tool, I leave the feeling of painting with a brush while  
creating a smooth gradation.

Even green leaves mix bluish and yellowish  
colors.



R 65	R 5	R 45	R 80	R 155	R 200	R 215	R 170
G 115	G 130	G 160	G 165	G 205	G 230	G 250	G 210
B 70	B 60	B 65	B 65	B 105	B 130	B 110	B 65

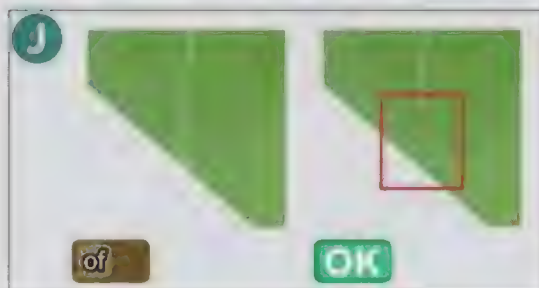
## 07

## draw leaf veins

Fuumyaku

The veins are drawn by painting with a color with a higher brightness  
than the others. However, as in , the lateral veins should disappear without  
drawing to the edge of the leaf.

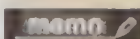
The leaf vein arrangement includes bifurcated veins, parallel veins, and reticular veins. In primitive ginkgo with forked veins, the  
veins are open toward the outside of the leaf, but in parallel veins and  
reticulated veins, the veins are connected and circulate. However, in  
reality, the details where the ends are connected cannot be seen unless  
it is a close-up, so it is better not to draw the lateral veins of the  
reticulate veins, which are not open, such as forked veins, to the  
very end. would be good.



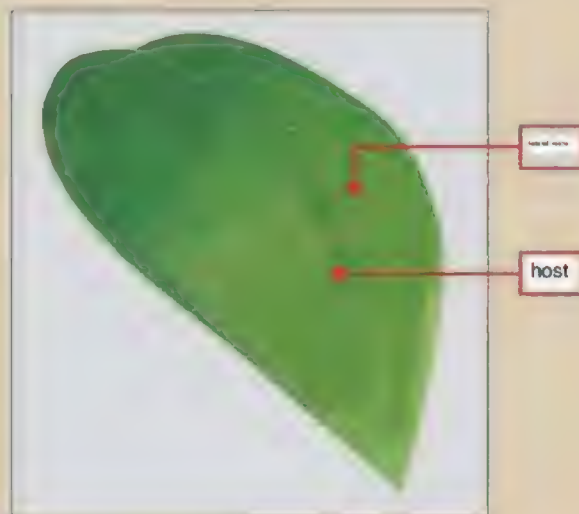
Do not draw the sides to the edge of the leaf



The lateral veins of the reticular  
vein are branched and connected before the  
edge of the leaf.

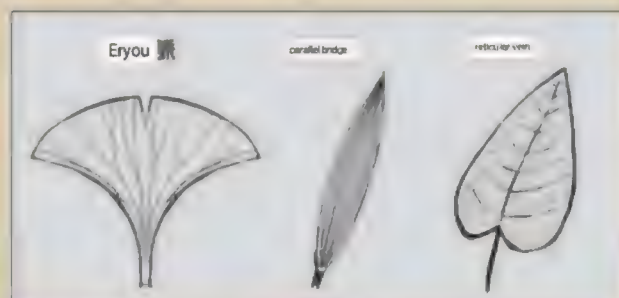


vein name



Main (shumyaku) thickest leaf 脈

Sokumyaku Branching from the main vein 葉脈

Saimyaku: Small leaf veins connecting the main and lateral  
veins are often omitted and not drawn 脈

Forked veins: Ginkgo biloba, ferns, etc.

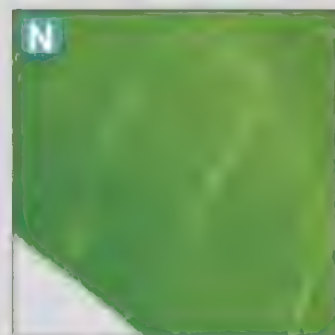
Many monocotyledonous plants such as parallel veins Reticulated

veins Common in dicotyledonous plants such as cherry blossoms

The veins are also painted with a brush, but some people may want to use a path to draw curves, etc. In that case, if you select a hard brush such as a hard circle brush, the line drawn with [Brush bus border] is not good because it is too hard and floats out of the picture. Since the line is drawn with the selected brush, you can reduce the hardness by drawing a line with [Brush the border of the path] with the "Custom "Brush" brush selected.

You can

Even so, the hardness remains, so it's better to use the [Brush tool] and draw normally freehand without using a path. However, even when drawing with a path, it is possible to create a natural finish by filling in and erasing or thinning the veins based on the background.



If there are other leaves, add their shadows. By adding shadows, you can also change the color of the leaves, and the colors will be tighter. If you can insert a shadow, you should definitely include it.



You can change the angle of the leaves to some extent by squashing them vertically. It is also possible to increase the number of leaves by duplicating and transforming.

In the example, I simply duplicated it, but if you put the duplicated thing right next to it, it will be easy to see that it has been duplicated. You





# 桜



Cherry blossom trees are often drawn to represent graduations, school entrance scenes, and the spring season.

The Somei-Yoshino cherry tree was bred and spread in the late Edo period, and is the most planted variety in Japan today. However, if it is set in an old time such as before the Edo period, it is not Someiyoshino. in some cases.

Somei Yoshino trees are around 10 to 15 meters tall, with a diameter of 10 cm for young trees, 40 cm for mature trees, and 90 cm for old trees. Here, I will draw a full-blooming Somei-Yoshino cherry tree.

## paint point

### 01

#### Differences in how to draw leaves and flowers

The cherry blossoms are basically drawn in the same way as the "tree" leaves (p.50), but the following points should be noted. If you want to draw both cherry blossoms in full bloom and cherry blossoms with leaves in a small size, you can draw them in a silhouette like A. many cherry blossoms

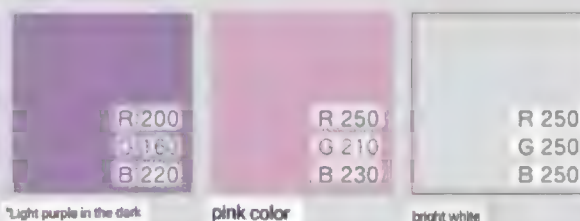
Even if you want to make it look bigger, you can draw cherry blossoms in full bloom. However, it is necessary to draw the leaves neatly, as in the case of hazakura.



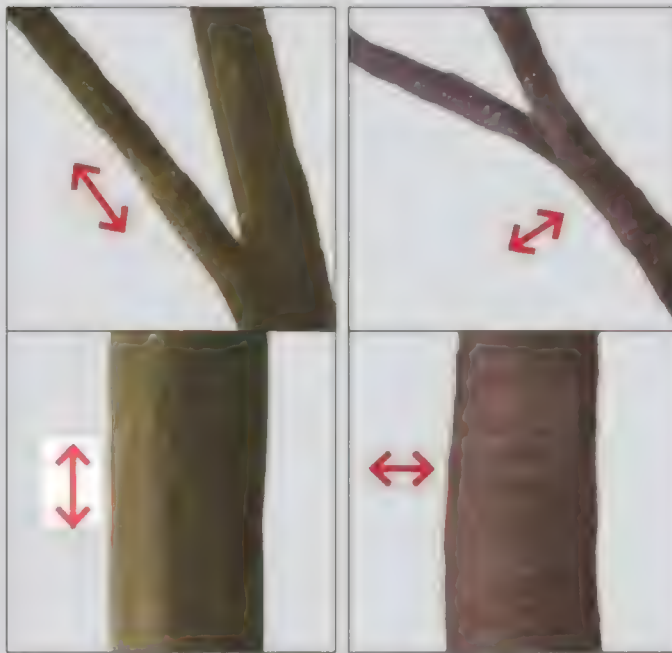
### 02

#### choose flower color

Flowers are mainly painted in white to pink. For the shadow color, instead of lowering the brightness of the pink color, make it slightly bluer and make it light purple. The point is to increase the overall brightness without making the shades too dark.



Cherry bark is characterized by horizontal grains, so stroke horizontally.



longitudinal bark

bark of horizontal stripes (cherry blossom)

However, just because it's cherry blossoms doesn't mean you have to make horizontal stripes. As the bark ages, vertical fissures and irregularities form, making it difficult to see horizontal grains.



Russhu

old tree

### point of effect

## Add effects with adjustment layers

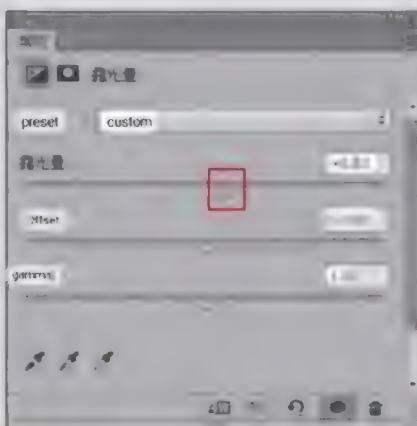
I think that cherry blossom trees are often used in impressive scenes such as graduations and school entrances, so I will explain the effect of creating a slightly magical and warm atmosphere.

Create any of the [Exposure], [Levels], [Level Correction], and [Tone Curve] adjustment layers above the tree layer.

produce a similar effect no matter which one is used

However, by using these adjustment layers, you can make the bright areas brighter and blow them away, or darken the dark areas more darkly. This enhances the contrast between light and dark and makes it look better.

簡



Move the light intensity slider to the right to brighten



level correction

Level Correction: Move the white slider to the left to increase brightness, and move the black slider to the right to increase darkness.



tone curve

Raising the right side of [Tone Curve] emphasizes brightness, and lowering the left side emphasizes darkness



Adjustments such as [Level Correction], if done too much, will result in a pure white or pure black, so be careful to make adjustments appropriately



too much white



black and too wet

Create a layer under the adjustment layer and A lighter color such as lilac (R230 G185, B230) can be applied with a large brush for a brighter effect. adjusting the colors. I left the blending mode of this layer at [Normal] in the example, but you can change it to [Screen] etc. If the effect is too strong, lower layer's [Opacity]. In the example, it is set to "60%". If you look closely, you can see that I painted the right side of the trunk a large light purple color, but this part was actually washed out with the adjustment layer.

The reason why I paint the areas away from the trunk is that if I paint directly onto the trunk, the paint will be too dark or the gradation will not be smooth. In this way, you can create the perfect effect by drawing with a large blur brush at a slightly distant position.



In order to make it easier to see where it was painted, the background is black with the [Opacity] of the effect layer set to "100%".



# flower



There are various types of flowers. There are "joint-petaled flowers" where the petals are connected like the morning glory, "separate-petaled flowers" where the petals are separated from each other, and "ray-like flowers" like the dandelion.

The number of petals also varies.

The flower drawn in the example is based on the buttercup family "Ichirinsou", but these white not actually petals. The petals have degenerated and are gone, replaced by sepals (the part that normally sits on the outside of the petals) that look like petals. Although there is an academic difference, here I will refer to the sepals of this 'Ichirinsou' as petals.

It's best to set a specific type of flower and draw with reference to the reference material, but if the type of flower is not important and you want to easily add flowers to create an atmosphere, you can use a five-petal pattern like this. If you draw flowers, you can put them together safely

## Drawing point

01

The petals use the circle as a guide for hitting

① When drawing flowers, if you use the circle as an aid for Atari

Easier to draw.

(2) By taking the method of drawing the petals from the center point

of the circle, you can draw without disturbing the balance even

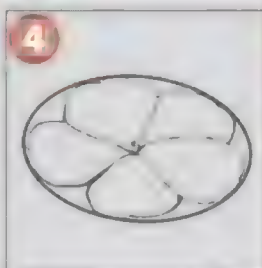
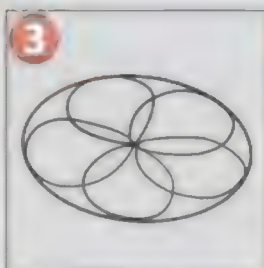
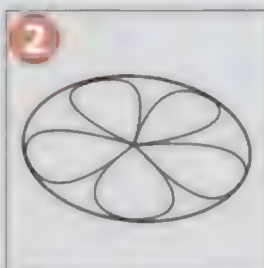
if it is at a difficult angle.

③ In the case of a flower whose petals overlap each other, draw them overlapping like a Venn diagram at the drawing stage.

④ Erase the lines where the petals overlap. ⑤ Arrange the lines

and erase the circular auxiliary lines to complete the line drawing of the flower.

is.

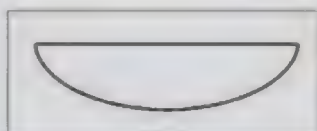
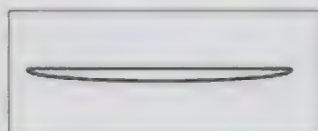
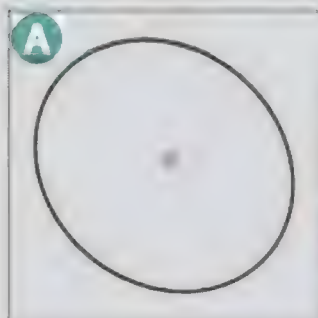




Although it depends on the type, the outside of the petals often faces inward, so by shifting the position of the center of the circle, it is possible to create a bowl shape instead of a flat circle.

can be shaped like to draw petals using

You can get a three-dimensional effect like this



### paint point

- ① Based on the shape of the line drawing, paint the base
- ② layer with white. Draw a gradation in light purple (R220, G215, B240) using a large bokeh brush. You may think that it is not enough because it is only a little colored, but there is no problem even if the painting of the petals is completed at this level. Most of the patterns that become subtle when drawing flower petals are overdone and result in a negative result.
- ③ When drawing, use the "Custom brush" brush (p.9) and adjust the [Opacity] of the brush to paint thinly. Again, be careful not to overdo it.



base layer



Gradation

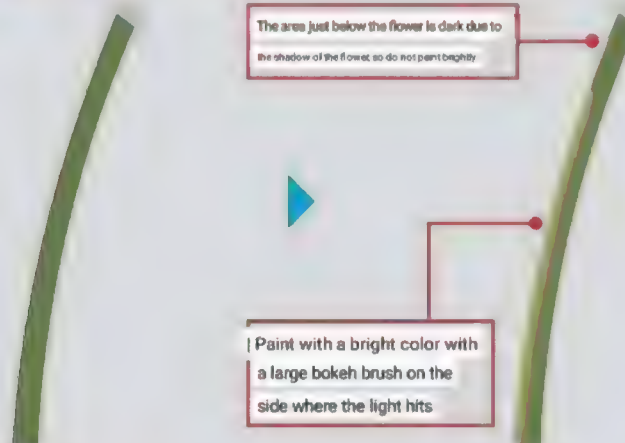


draw in

Petals have veins called veins. However, if you draw the flower veins, it will be messy and often unnecessary, so be careful.



flowers are too conspicuous



Stem base layer (R115, G145, B70)

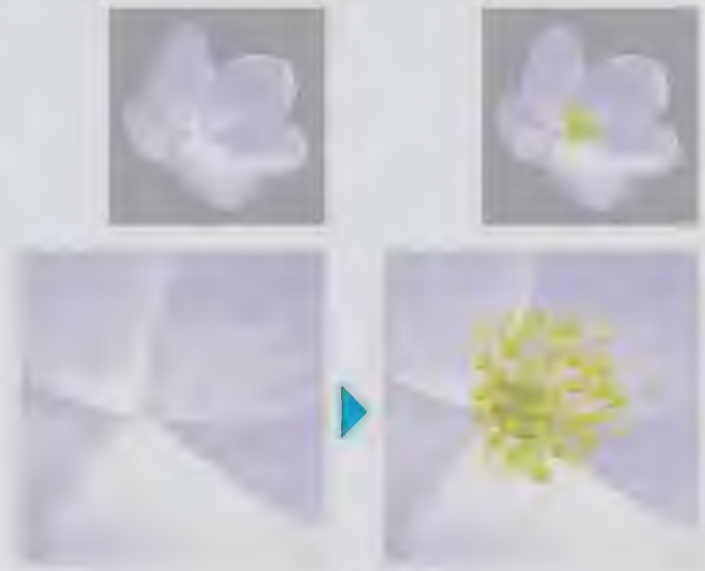
06

## Draw stamens and pistils

"Ichirinso" has pistils and many stamens. The green ball in the center is the pistil, and the numerous yellow bars are the stamens.

The stamen has a flower system that supports the pollen in it. You can duplicate the anthers, but it is better to use rotation or transformation so that they are not all the same shape and facing the same direction.

In addition, since the thing extending toward this side is the point of view of the anther from directly above, the filament is hidden in the middle and cannot be seen.



07

## draw a shadow

Draw the falling shadows of petals and stamens that overlap on top themselves because you can add shadows and shadows to finish them without

Even if you keep this sharpness down, you can draw in the petals making them look rough.

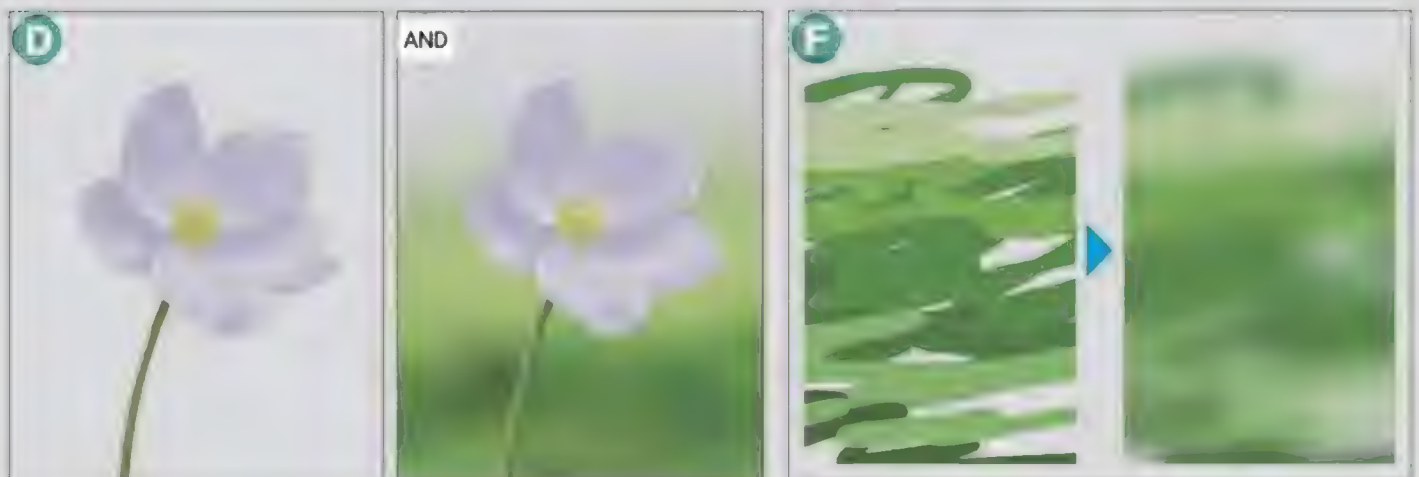


08

## Draw a background with the flowers in focus

**D** is the state where the stem and petals created in the previous process are displayed. With white flowers, if the background is left white, there will be places where the shape is difficult to understand, so I draw grass in the background like the sun.

However, since the flowers are the main focus here, the background is blurred and the flowers are in focus. Even if the original is suitable like , if you blur it with the "Blur (Gaussian)" filter, it will look like it.







There are cone-shaped mountains like Mt.

I will explain how to draw a mountain of.

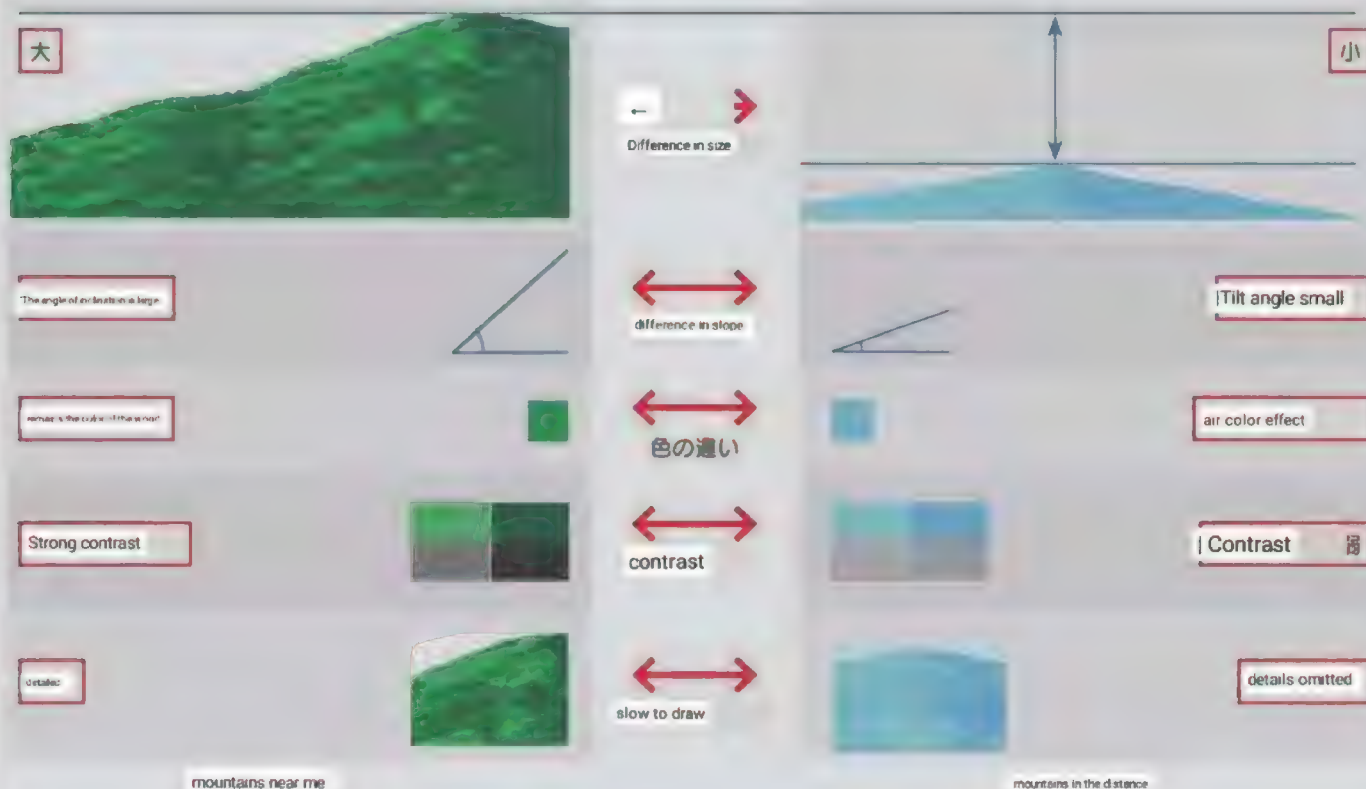
As the distance increases, the color of the air influences the color of the image. Mountains are often in the distance, so this is the background where I have many opportunities to be conscious of aerial perspective. Aerial perspective does not always represent air effects in blue. In the sunny daytime, I use a color that is closer to blue, but in the evening or when the weather is bad, I use a color that takes into account the influence of the atmosphere at that time.

## 01

Difference between distant view and near view

Drawing distant objects smaller is the basis of perspective expression, but in the case of mountains, the angle of inclination is also smaller. This can be easily understood by considering that it eventually becomes completely flat as far as the horizon.

As shown in the figure, there are various differences between the distant view and the foreground, so even if the foreground mountain is reduced as it is, it will not become the distant mountain.

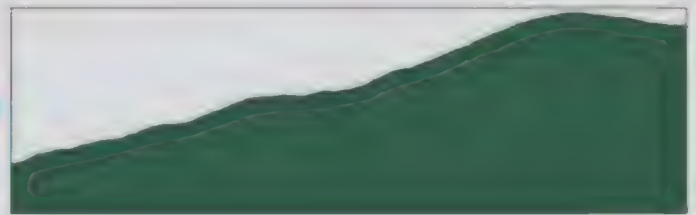
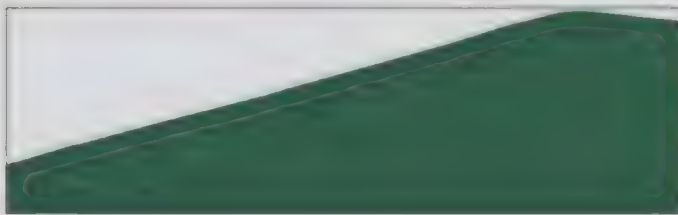


02

## draw a ridge

Paint the base layer with a solid color (R0, G100, B65). Edges are not straight lines, but can be drawn with the [Eraser tool]

Add a hand and draw unevenly.



03

## draw shadows

Paint with bright green (R0, G190, B80) and shade the mountains by creating light and shade. If you do not have a fixed image of the mountain from the beginning, it is recommended to expand from where you drew it.

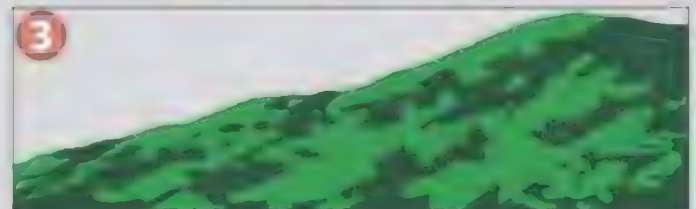
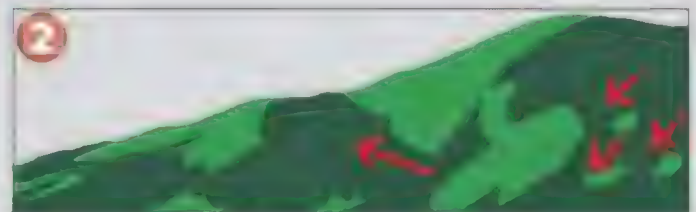
(1) It will be a hint to draw in by drawing while drawing appropriately. However, if you paint too linearly as in the NG example, there will be no starting point and the next

It's hard to decide how to paint, so you need to be careful.

2 Extending shadows to the left from the protruded parts, and drawing spots where light hits the shadows on the right.

To do.

3 Then, add and remove light and shade to refine the look.



04

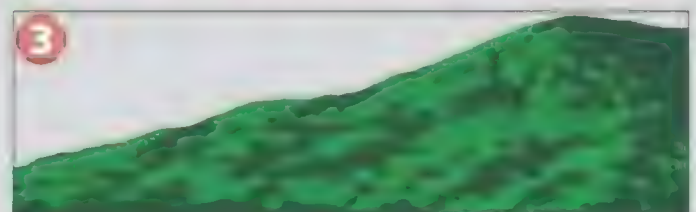
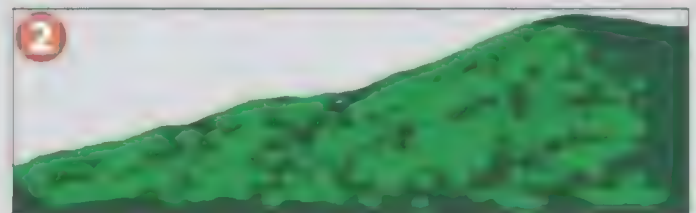
## Draw with the point-to-point drawing method

In addition to drawing shadows like [03], you can also use the "Point-to-point drawing method" described in "Shrubs" (p.52). • Draw a point. Use the "Custom Flower" brush (p.9).

Paint so as to connect two points. Be careful

not to connect and fill all the dots so that shadows remain.

3. Apply to spread the shadow color that is not painted and is in the gap.







Overall

tidy up. is expressed

**A** as a line drawing to make it easier to understand the painted area

image. Imagining that there is a tree like this line,

draw it with the "custom brush" brush so that it becomes

uneven.



By doing step 5 on the whole, I fixed the rough shadows, but since I painted with almost two colors, the shadow color and the light part color, the overall shadows are difficult to see. So I add a shadow layer and a light layer as new layers. Set the blending mode of both layers to [Normal] and set the [Opacity] to about "50%".

The reason for painting the shadow layer is that the shadow that I imagined in the beginning became difficult to understand while painting, so I painted some places such as 03 where I tried to make shadows in the beginning.

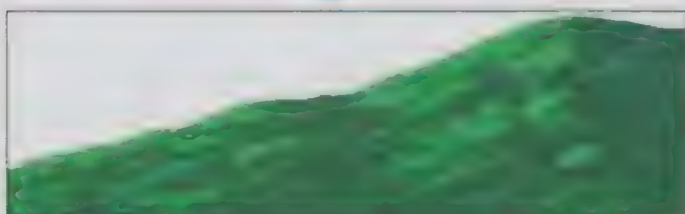
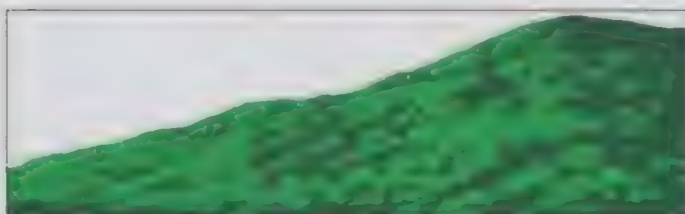
vinegar. Add a slightly bluish color when painting the shadow layer to expand the range of colors.

For the light layer, paint dots around the ridgeline on the light source side.

The color of the light layer is also yellow in addition to increasing the brightness

The width of the color is widened by making it more yellow-green by adding .

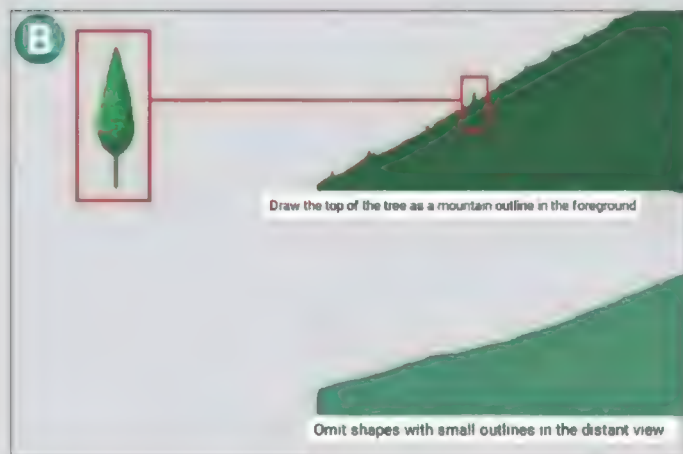
Also, the shadow layer and the light layer are separate layers so that the shadow range can be adjusted while painting. Once the painting is finalized, you can merge it into a single layer.



"When drawing for the foreground, I draw the outline of the

mountain while keeping in mind the shape of the tree.

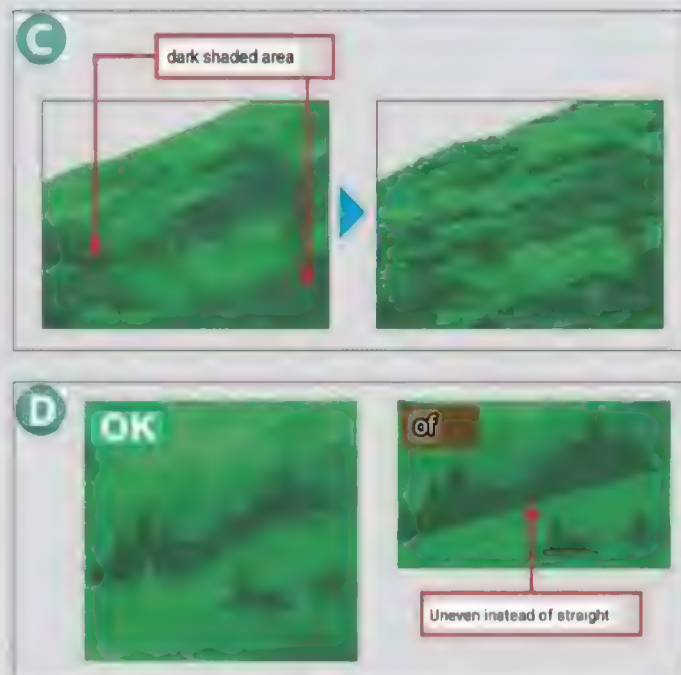
Draw a colored tree. Even if you draw a tree,



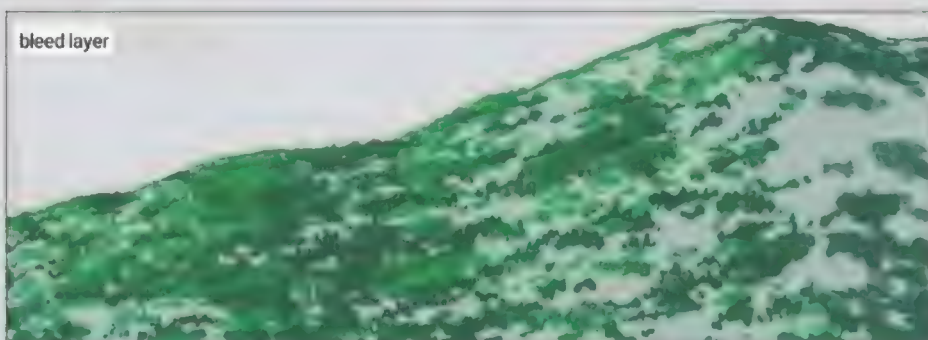
Instead of drawing the shape of the tree, just draw it so that

it tapers like . The underside of the part painted in the dark

shade is not straight, but uneven so that it looks like the top of the tree under bright light.



07 Then paint the details of , all over the mountain. As you can see from the bleed-in layer, I added paint evenly.





# palm



Palms are useful when expressing the image of summer or a tropical country, and are often drawn together with the "sea". They come in a variety of sizes, from small ones used as houseplants to ones that can reach a height of 30m.

As with "leaf" (p.56), palm leaves are also explained in terms of two types: "sideways" and "frontal".

If you draw side leaves, front leaves, and a trunk, you can draw a palm tree.

## leaf / point

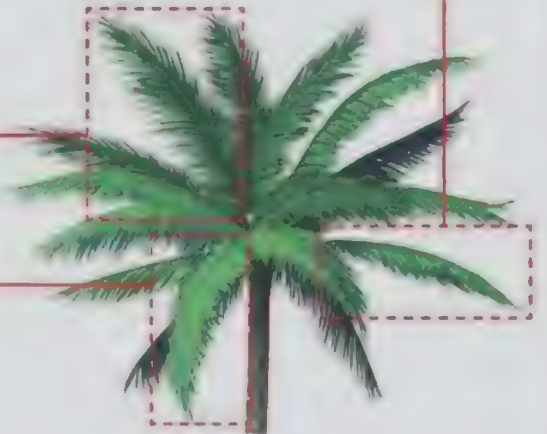
01

### draw palm leaves

Upo palm

leaves are pinnately compound leaves, with small leaves lined up like wings on the left and right sides of the leaf axis.

I will draw by arranging the two types of leaves, "sideways" and "front", at different angles. Both downward and upward leaves can be drawn in almost the same way as front leaves by rotating the angle. I will explain the subtle changes in the angle of the front leaf in 5.

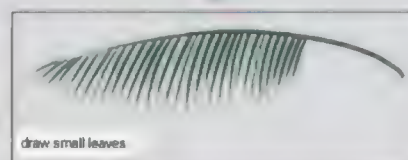
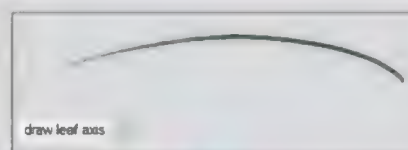


02

### Draw the foreground leaflets

Draw the lobules in green (R30 G80, B60). For the foreground, draw a line with a brush that can draw outward from the leaf axis to draw the leaflets. Space the leaflets so that there is only a small gap between them.

If you want to draw the leaves in more detail, or if you cannot draw well with a brush, it is effective to use the [Pen Tool] to select and draw the leaves one by one with a bus.



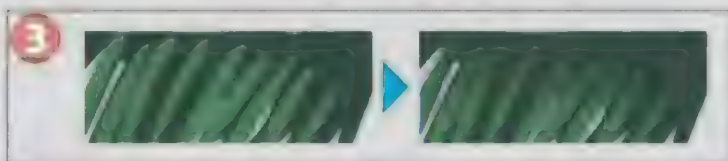
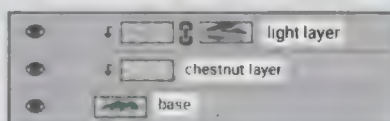
In the case of a distant view, draw small leaves without leaving any gaps (simplify the details).



(1) Create a new layer (leaf axis layer) and draw the leaf axis with a bright color (R85, G210, B100) in the center of the leaf using a brush that can be removed.

2 Create a new layer (brighter layer), apply a clipping mask so that it does not protrude from the base layer, and paint the leaflets with light colors (R75, G180, B95).

• Create a layer mask (p. 91) on the light layer, and erase the edges of the bright colored leaves with the [Eraser Tool] with a large bokeh to create a gradation.



**B** is a deformation that crushes vertically so that the leaflets on the back side of the leaf axis (upper side of the figure) are shortened. By deforming the front leaf in this way, it is possible to respond to changes in the angle of the leaf.

Instead of shortening, the leaflets on the leaf axis can be erased and left completely on one side of the leaf axis to create a sideways leaf.





Add another layer to the sideways leaves made in step 105.

Add leaves. Make sure that the

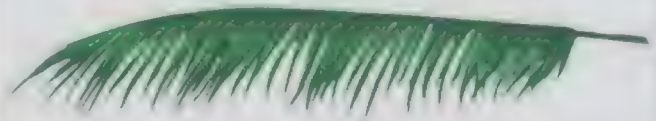
leaflets in the back can be seen through the gaps between the leaflets in the front.

vinegar. Therefore, the copy of the front leaf has the same shape.

I can't use it because I can't use it. Draw a new one or use a copy of another leaf.

What I want to pay attention to is the color of the lobules in the front and the lobules in the back. If the colors are the same, they will be assimilated, so change the hue and brightness. Here, the lobules in the background are drawn in blue (R25, G90, B85) while the lobules in the front are green. The leaflets in the back can be silhouetted, so a single color is fine.

leaflets in front



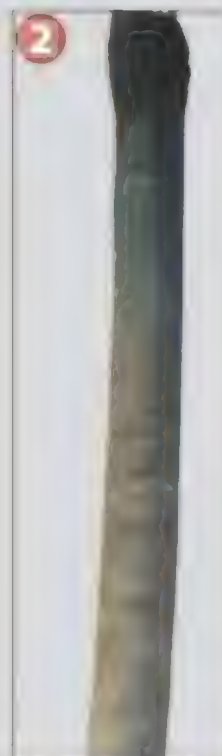
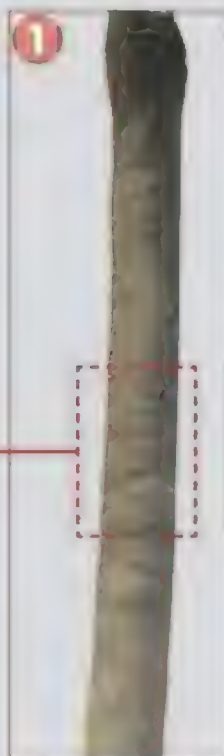
inner leaflet



## stem point

- It is basically the same as drawing "Trees" (p.48). Overpaint with the 'Custom brush' (p.9) with a lower opacity. Unlike the trunk introduced in "Trees", the trunk of the palm is painted with horizontal strokes.

- (2) This will lead to the next step, but the upper part of the trunk will be in the shadow of the leaves, so draw it dark. The point is not just to darken it, but to add a little blue color.



Create a leaf shadow layer and darken it. You can make it darker as you go up by creating a drop shadow layer with a gradient. Layer drop shadow layer

— Use the mask (p.91) to erase and draw the sunlight filtering through the trees. A clipping mask is applied to the trunk layer so that the shadow layer does not protrude from the trunk. The blending mode of the layer is [Normal] and the [Opacity] is set to "50%". Here, I introduced how to create a layer for falling shadows and draw the sunlight filtering through the trees, but if there is no time difference and there is no need to hide the sunlight filtering through the trees, you can create a single layer without dividing the layers. You can also draw sunlight filtering through the trees on the layer



Even if you draw the base layer well, it will be ruined if you do not apply it properly. Also, in the NG example, not only the way of painting but also the use of color is not good.

Hmm. Since the color of the trunk is a solid brown, it doesn't look real.





# seaside



The sea is often the background for summer scenes. If you want to add a touch of summer, it would be a good idea to draw "Thunderheads" (p.12) together.

Here we will draw a shallow coastline. The white sand creates a gradation from light blue with high brightness. Instead of the sandy beach like in the example, if you want to draw a beach where the water depth quickly becomes deep, use a darker blue gradation.

## sea level point

01

determine the color of the sea

the color of the sea in Japan with reference to a photograph, the result will be a dark color like this.

Even if the setting is the sea of Japan, it is common to draw cobalt blue or pale turquoise to give a beautiful tropical water color, giving priority to appearance.

\*you reproduce



Kachikachi store room



cobalt blue



veil turquoise

02

Draw the sea surface with gradation

1 Draw the gradation of the sea surface and the sky to come.

(2) Add a darker blue gradation to the sea surface near the horizon.

3 Add a gradation with a large brush to make the front side brighter.



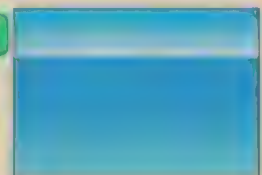
memo Separating the color of the sea surface and the sky with a gradation

If the colors of the sea and the sky are close, it will be difficult to see the boundaries as shown in the NG example. By adding a gradation so that the sky near the horizon becomes white, you can make the boundaries clearer.

of



OK



03

Blur the horizon slightly

If the horizontal line is completely straight, it will give a hard impression, so blur it a little. If you are separating the water and sky layers, use a large blur eraser or layer mask.

(p.91) to blur it out. If not, use a large bokeh brush to smudge the horizontal line.

blur the horizon

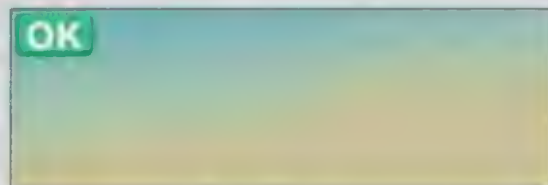
04

Add a gradation to the boundary between the sandy beach and the sea

"I use a large blurry brush to create a gradation between the sandy beach and the ocean. color."



A water edge drawn by selecting an area with a brush or path without blurring



The water's edge drawn with a gradation using a large poke-foot brush

05

Draw the light and shade of the sea surface

Draw the surface of the water by moving the brush horizontally in the same way as when drawing the light and shade of the "Ground" (p.40). Set the [Opacity] of the brush to a very low setting (10% or less) so that it does not become too dark all at once.

Here, if I paint too much, it will look unnatural, so I didn't draw too much, especially the background, and kept it simple.

Better.

If you can't draw this light and dark paint well, select [Filter] → [Blur] → [Blur (Move)] from the menu and apply a filter with [Angle] set to "0°" and [Distance] set to "100". By applying, even a carelessly drawn line can be adjusted to some extent.



06

Points to note when drawing the light and shade of the sea surface

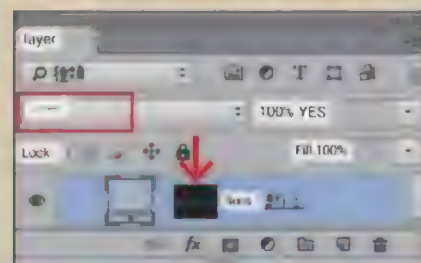
Since I applied a gradation to the base of the sea surface, if I continued to draw light and dark with the same color, the difference in lightness with the surroundings would widen. If you paint the bright areas with the same color as the dark areas, as in the NG example, it will become too dark. Therefore, as the color of the base gradation becomes lighter, it should be painted with a lighter color.



memo

A technique that can be done without switching colors

A solid layer with the blending mode set to [Multiply] By painting a light gray on the first layer mask, you can paint the dark areas without being affected by the change in darkness caused by the base color





07

draw a wave

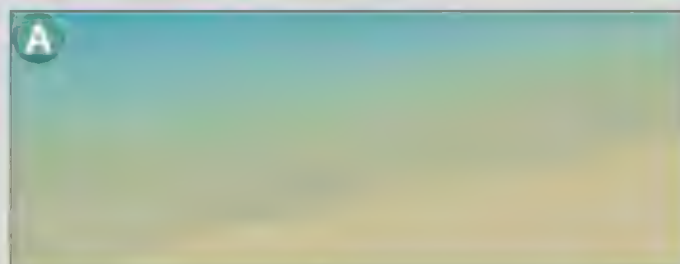
- 1 04 up to. Since the boundary between the sandy beach and the sea is rendered as a gradation, the water's edge is not drawn.



- 2 Draw a white foam on the boundary between the sand and the sea. Details on how to draw will be explained in 08 09.

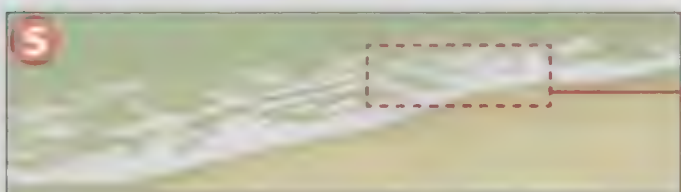
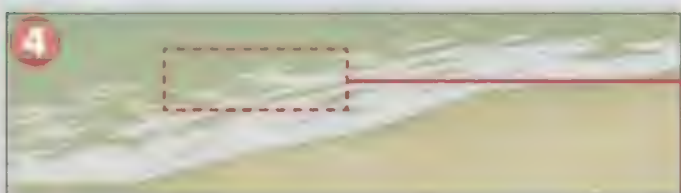


- (3) Darken the color of sand in wet areas to make the whiteness of the foam stand out. I paint while the foam layer is visible, but I hide the foam layer so that you can see where I painted.



08

draw bubbles on the beach



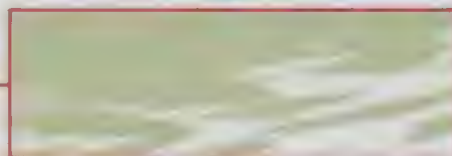
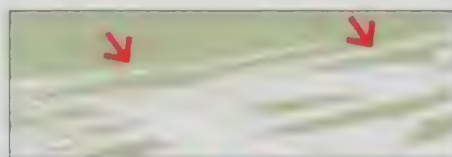
- Because the edge of the seawater becomes foam, paint it white.

- (2) Paint without worrying about gaps, as holes will be made later.

- 3 The more you go to the beach, the denser the bubbles, so the more you hit the waves. Fill in the edge side.

- 4 Erase from the farthest from the beach.

- 5 Poke a hole in the foam to create a gap between the bubbles.

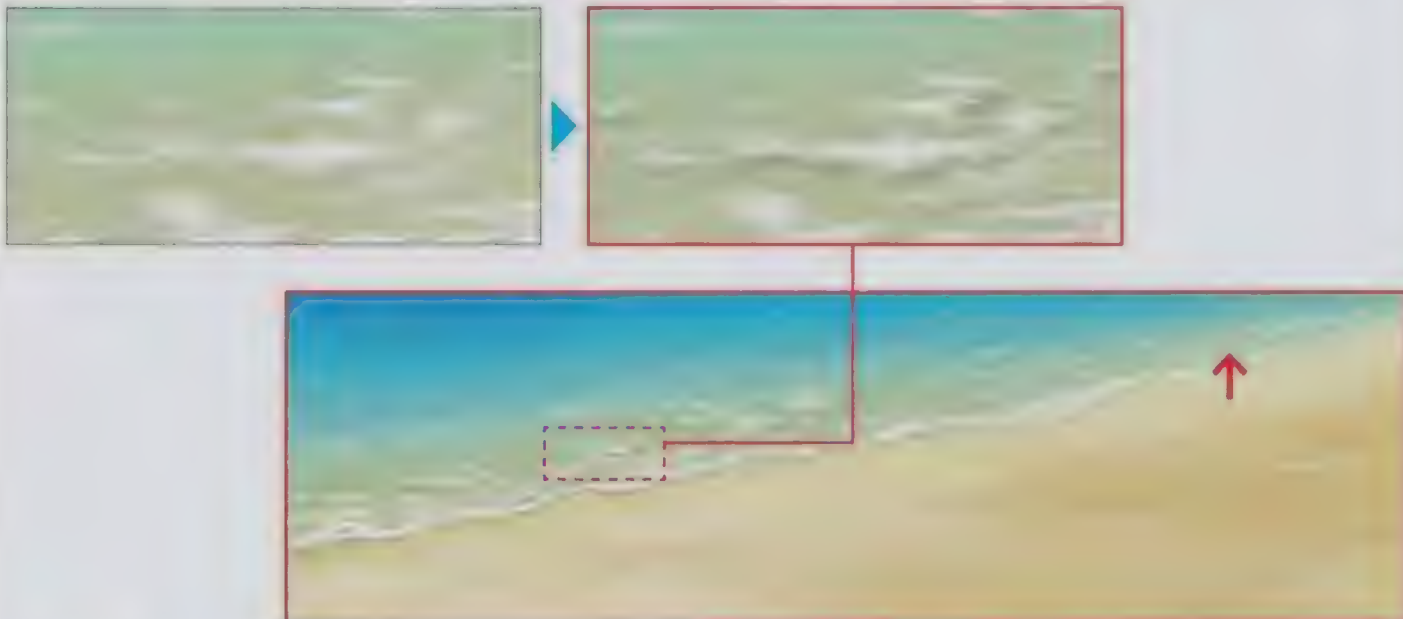


09

## draw bubble shadows

In the water, I sometimes draw light-condensing patterns and light reflections on the sea surface in white.

The shadows of the bubbles are not necessary for the distant parts like the arrows. Conversely, if you draw a distant view, it will become negative. This drawing should be for the foreground only.



10

## draw a beach

The sand beach is drawn in the same way as the "ground" (p.40) (because it is a sand beach, pebbles are not drawn). Actually, this sandy beach is transformed by transforming the ground layer drawn in "Ground".

I made it by adjusting the parts that did not match the shape, and blowing off the distant parts with white.

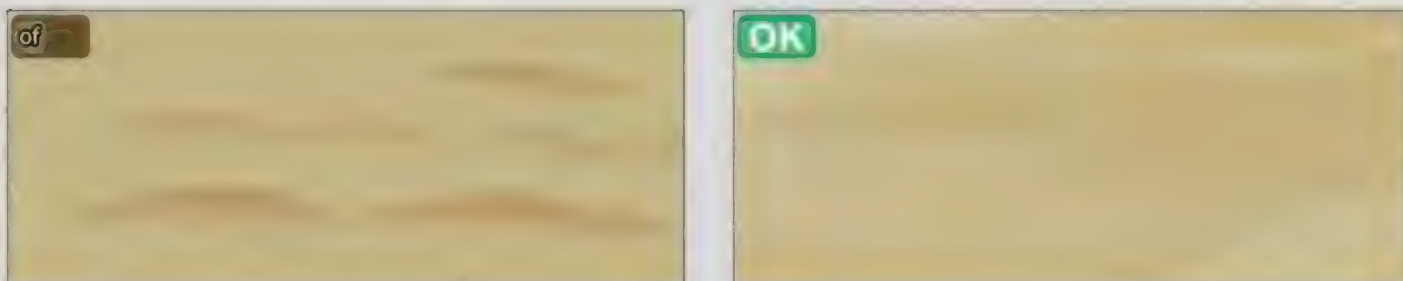


11

## Notes on sandy beaches

"By selecting an area with a bus, etc., and drawing a gradation with a large poke-foot brush, you can draw the undulating slope of the sand like the NG example. The sand will stand out too much.

It is NG because the touch is different from the picture. Also, in the NG example, the sand texture is added too strongly just because it is sand. This also tends to be negative, so you need to be careful.





# lake



The surface of the lake is often calm, and it can be said that the water surface reflects the surrounding scenery. In the example, mountains and sky are drawn to reflect the water surface of the lake, but here I will focus on how to draw the reflected water surface.

In the explanation, the color of the water is blue so that the mirror image is easy to see, but in the finished image, the color is green, which is the actual color (p.81).

Point of mirror image on the water surface

01

draw water surface

Similar to the sea surface of "Beach" (p.75), I use the "Blur (Move)" filter to adjust the rough surface of the water.



02

create a mirror image of the water surface

If there are mountains near the lake, they will be reflected on the surface of the water. Here we will explain how to create a mirror image by duplicating a layer.

① This is the state before adding the mirror image.

(2) Flip the duplicated and merged layer vertically and add the water surface clipping mask on the layer.

(3) Reduce the [Opacity] of the mirror image layer to about 70%. If there is no wind and there are no waves on the surface, you are done.



In 12, I explained how to vertically flip the duplicated and integrated layer, but you need to be careful about the rocky area on the right side of the screen. Since the rocky area is in contact with the mirror surface (water surface) in the near side compared to mountains, etc., the position to be reversed is

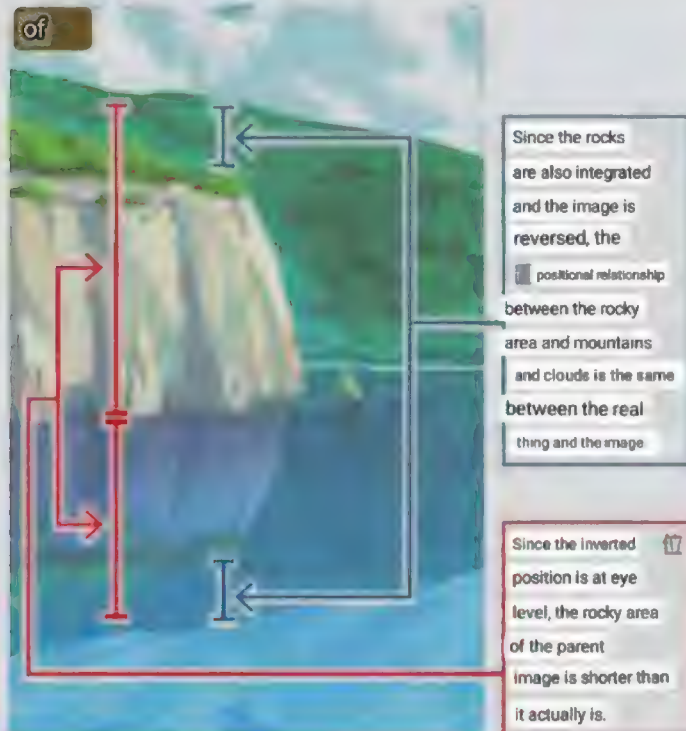
It must be in a position where it touches the mirror surface without

It is necessary to separate and flip each position that touches the mirror surface.

There is

Flip the image integrated with the rocky area at the eye level

The rocky area in front is flipped individually at the position of the water surface



In 3, I explained that the position of the specular reflection must be changed because the rocky area is in front of the mountain. Then, is it necessary to change the position of the specular reflection of the clouds in the foreground in the same way?

It should look like a small dot. Therefore, in such a case, the correct answer is the mirror image of the OK position inverted at the eye level.

Compared to the clouds in the back, the clouds in the upper right appear to be closer, so it seems that the NG position is appropriate. But this is the wrong position on the cloud ground.

The difference between clouds and rocks is the distance from the mirror surface. If it's very far away from the specular surface, like clouds, it's safe to assume that it's flipped at eye level.

To give you an idea of the size, let's imagine a person standing at that point. Here, the length from the mirror image of NG to point b is about two and a half. Of course, the height of the clouds is not as high as 2.5 people, and the clouds at point b are far above the sky and are not included in the screen. So NG this position turns out to be wrong.

The person who is supposed to be under this cloud is originally a small figure at point a (eye level).



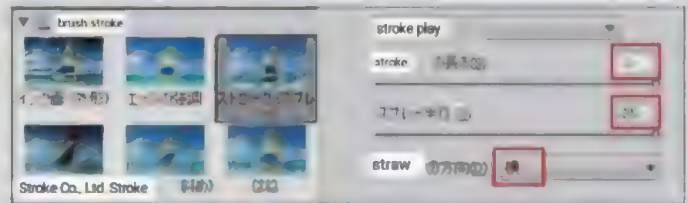


05

Draw fluctuations on the surface of the water

If there are waves on the surface of the water due to the wind, etc., the mirror-reflected image will be disturbed, and the boundary between the mountains and sky in the mirror image will be confused. To express this fluctuation of the water surface, I use [Stroke (Spray)] from [Filter] > [Filter Gallery] > [Plastic Stroke] from the menu. Set Stroke Length to 20, Spray Radius to 25,

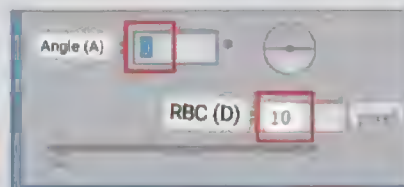
When [Direction of Stroke] is set to "Horizontal", the image changes to a flickering image as shown in the figure.



06

adapt to fluctuations

When the [Stroke (Spray)] filter is applied, it looks a little grainy, so in order to blend it in, I used [Filter] → [Blur] → [Blur (Move)] from the menu. Set Angle to 0 and Distance to 10.



When light hits an object, some colors are absorbed and others are reflected. We perceive the reflected color as the color of the object. Light can pass through transparent objects, so colors cannot be seen.

The water is almost transparent, but has a slight blue-green color. As the amount of water that passes through increases, colors such as red are absorbed and blue and green are reflected, resulting in a blue appearance.

**B** It's hard to tell if it's about the size of a small cup like the one on the right, but if you put it in a slightly larger white container like the one on the left, you'll notice a faint bluish tint. However, at this level, rather than being blue, it feels like it's a little less bright.

If the color of the bathtub is dark, it is difficult to recognize the color of the water, but if the color of the bathtub is bright such as white, the color of the water can be recognized.

Places where the amount of water is small, such as in a glass, and places where the water is shallow, such as near the water's edge, are not affected by the color of the water itself. I guess.



pool

The bottom and walls of the pool are blue, so there are factors other than the color of the water itself that make it look blue. Therefore, without thinking about the amount of water, feel free to paint it blue.



rivers, ponds and lakes

Phytoplankton such as algae give rivers, ponds and lakes their green color. An additional factor that makes it appear green is the reflection of the green color of the surrounding trees and plants on the surface of the water. However, depending on changes in the amount of phytoplankton due to water quality and weather conditions, the water may be blue or another color instead of green, so there is no problem even if the water remains blue.

In the completed image of "Lake", I adjusted the [Hue/Saturation] of [Color Correction] to "Hue: -30", "Saturation +30", and "Brightness: -30" to make it green.



Sea

If the sea has white sand or coral and the water is not too deep, the light will be reflected on the sand, giving it a bright and beautiful light blue color. As shown in , the deeper the water becomes, the darker the blue becomes.

In addition, in deep, clear seas with little plankton, light does not reflect so much and light penetrates deep into the sea, resulting in a blue color that is close to black, similar to the Kuroshio Current.





# water pattern



I think that the mesh pattern in this example is what immediately comes to mind as an illustration of water. However, it is not enough to draw this pattern every time you draw water. I will explain how to draw this pattern and what this pattern is in the first place.

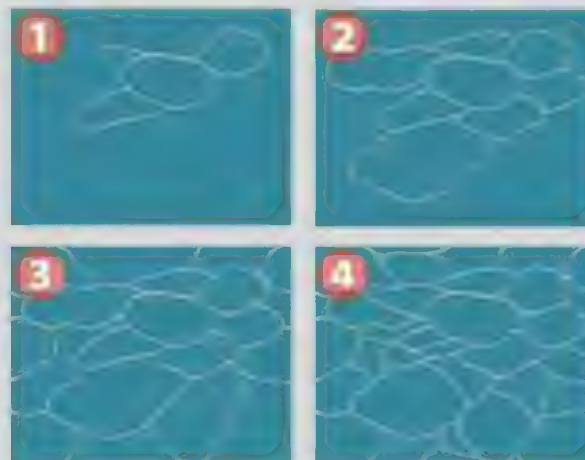
paintpoint

01

## draw water patterns

- ① Draw an appropriate curve and connect it to an ellipse. It doesn't have to be an exact ellipse.
  - ② I will add to the surroundings that I drew first.
  - ③ Add more blocks by freehand.
- If it is too big, divide it and add it to the outside.

video



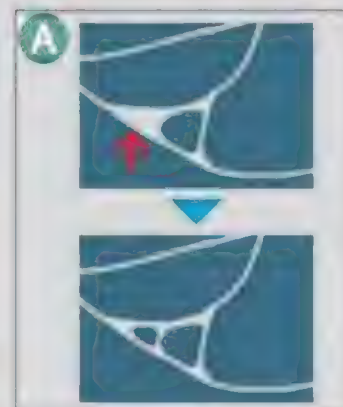
02

## Draw the details of the water pattern

01 explained the general flow, so here we will explain the details.

If you just divide the blocks appropriately, there will be places where there are sharp corners and no curves. Fill in the sharp corners so that they consist of curved lines.

A If the filled white area becomes too large, it will stand out strangely.



## 03

## Adjust the lines of the water pattern

Lines do not need to be drawn with a uniform thickness, rather they look better if they are thinned or faded. Use the "Eraser Tool" to scrape and shape.



uniform line thickness



Strength of line thickness

## 04

## What is a condensing pattern (caustics)?

From here on, the water pattern explained up to 03 is Think about what you are drawing. Light is sharply reflected and refracted by the curved surface of glass or water.

When collected like a tutu, it creates a pattern of light.

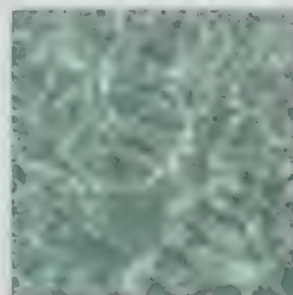
を集 This is called a light pattern (caustics).



Photos of light patterns on

glasses and glass balls

Light is sharply reflected and refracted on the curved surface of the glass and collected like a lens to create a light pattern.



Photograph of condensed light patterns

in the sea Light patterns can be formed on water as well as on glass

## 05

## 集 Light patterns are formed on the bottom of the water, not on the surface

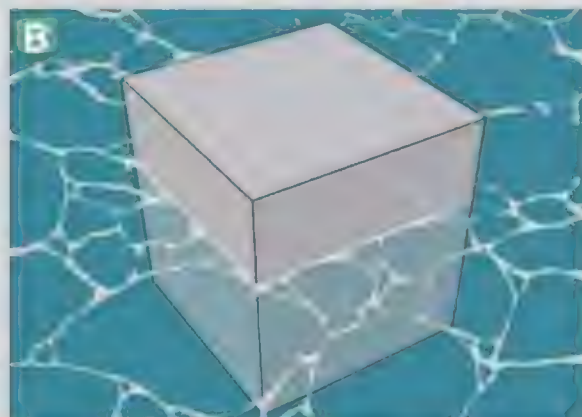
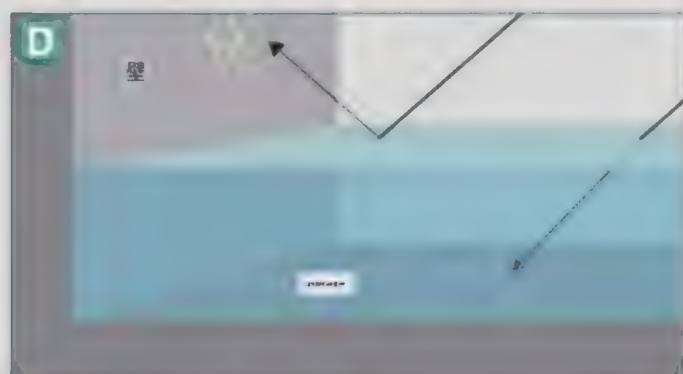
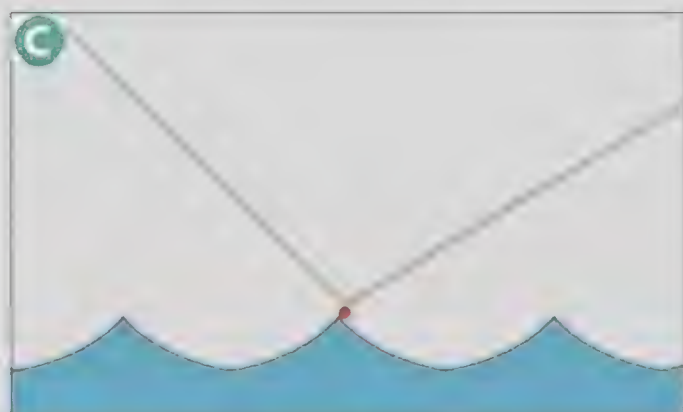
04 As you can see from the photo of the glass in , the condensed pattern is not the surface of the glass, but the pattern where the light that passes through the glass hits the table. In other words, in terms of water, it is not the surface of the water, but the pattern created by the light that passes through the water.

However, in the case of , the highlight and pattern of the boundary between the box

B and the water are connected, and it is clearly drawn as a water surface. is included.

Having seen pictures like this before, I also had a vague idea that the highlights were drawn due to the reflection of light at the height and narrowness of the waves. However, since the pattern of water is considered to be a condensed pattern,

If so, the story changes. The condensing pattern is a pattern formed by concentrating light through refraction and reflection on curved surfaces. Reflected light-condensing patterns are patterns that can be formed on surfaces such as walls, and refracted light-condensing patterns are patterns that can be formed on the bottom of the water. Condensed patterns cannot be formed on the water surface.





The fact that the condensed light pattern is not the surface of the water but the pattern of the bottom of the water means that it is necessary to be 'at a depth where the bottom can be seen and at an angle where the bottom of the water can be seen,' in order to see the condensed

Pattern

In other words, the condensed pattern is easy to see in shallow water and a bird's-eye view, but it is difficult to see in a deep water and side view.



The fact that the condensing pattern is the pattern of the bottom of the water means that, for example, when drawing a person submerged in water, the arm, etc.

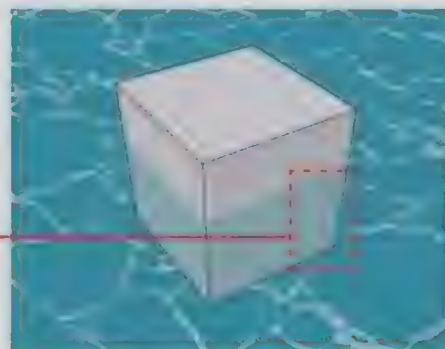
The condensing pattern on the bottom and the condensing pattern on the bottom of the water cannot be connected because the distance is different.



Since the patterns are connected, it is drawn as an expression of the surface of the water.



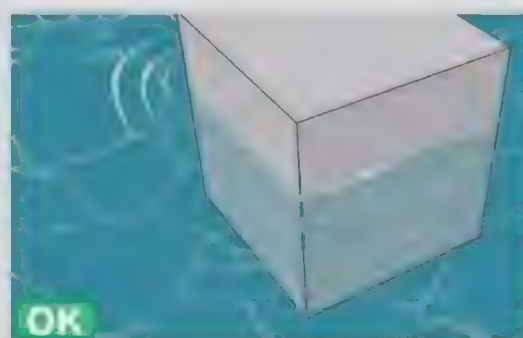
Since the pattern is not connected, it is drawn as an expression of the bottom and sides of the water



For the convenience of explanation, it is not erased in this figure, but normally the shadowed part of this cube blocks the light, so it is better not to draw the light collecting pattern of the bottom of the water in the shadowed part of the cube

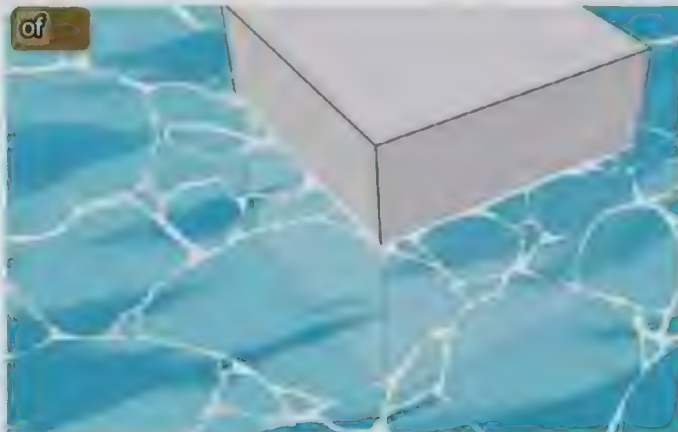
If you just paint the water pattern like a texture without thinking about whether it is the bottom or the surface of the water, you will end up with a strange picture. Here are some examples of inconsistencies. In the NG example, the pattern is not divided between the side of the box and the bottom of the water.

, you can see that the water pattern is drawn as if it were on the surface of the water. However, the ripples on the surface of the water are drawn without affecting the patterns on the surface of the water. If you want to use the water pattern and ripples at the same time, you need to draw the pattern as the bottom of the water.



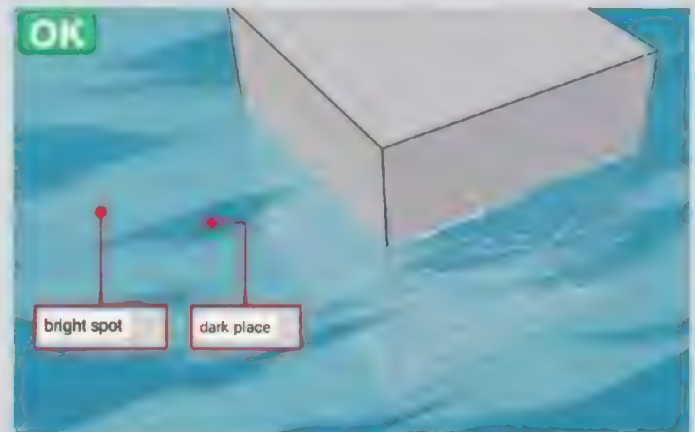
Since the pattern is drawn as water, it is consistent with the ripples on the water surface

There should be a difference in angle due to waves on the water surface between bright and dark areas, but in the NG example, the pattern on the water surface seems to be drawn on a perfect plane, which is inconsistent.



\*The pattern on the water surface ignores the unevenness of the water surface.

I have a feeling if it is drawn as a condensing pattern on the bottom of the water, there is no contradiction with the unevenness of the water surface.



Since the pattern of the water is drawn as the bottom of the water, it does not contradict the unevenness of the water surface.

## 10

## Is the water pattern a condensing pattern or a bubble?

So far, we have explained that the pattern of water is a condensed pattern. However, that does not explain the picture drawn as a pattern on the surface of the water like an eye.

This is the same drawing method as the condensed light pattern, but it makes sense if you think that you are drawing bubbles floating on the surface of the water instead of the pattern of light. It is also convincing that shadows of the same shape as the water pattern can be created.

Since the water pattern is used like a template-like symbol, I think that the person who draws it may be drawing without being conscious of whether it is a condensing pattern or a bubble. When you are in trouble, it is good to be conscious of "a condensed pattern when drawing on the bottom of the water, and bubbles when drawing on the surface of the water".



There is a pattern on the surface of the water, and since the shadow is falling, the pattern looks like a bubble.

## 11

## Express water depth with bubble shadows

The depth to the bottom of the water can be expressed by adding bubbles on the surface of the water and their shadows. All you have to do is duplicate the bubble layer on the water surface, darken the color and slide it. Shadows cast from bubbles on the surface of the water



The water depth is shallow when the shadow is close to the

The water depth can be expressed by the distance to shift the . The closer it is, the shallower it is, and the further away it is, the deeper it becomes.



The farther the distance from the hull to the shadow, the deeper the water



# water surface

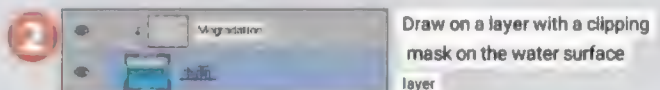


Here, we will explain "bar-shaped gradation" and "dots and reflections of light" as representations of the water surface. It also introduces the light and shade of the water surface in the foreground. I will start from where the sea has been painted, so please refer to "Beach" (p.74) up to 06.

## how to draw light reflection

### 01 draw a bar gradient

- Use a brush with a large poke foot and a brush size of 5000 or more.
- (2) Create a new layer, apply a clipping mask to the water surface layer, and then simply stroke the brush vertically.

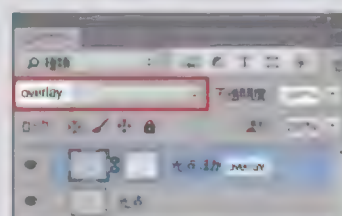


### 02 Draw dots and light reflections

The light reflected on the surface of the water is simply drawn in dots with a brush that can be removed (p.50). After drawing points normally, duplicate the layer, apply [Filter] → [Blur] → [Blur (Gaussian)] from the menu, and change the blending mode of the layer to [Overlay]. to illuminate.



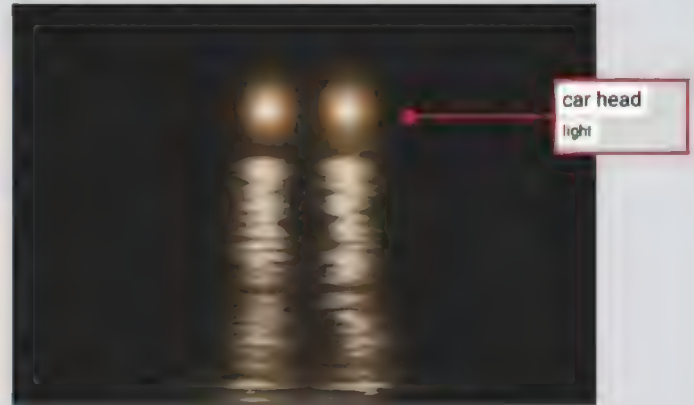
Duplicate and blur this layer, put a layer mask on it, and paint with a brush whose [Opacity] is lowered to reduce the amount of light.



In 101, I drew a bar-shaped reflection on the sea surface. The moon reflected on water at night, or car headlights reflected on wet asphalt, can also be depicted as vertical bands of light. Of course, there are cases where the moon is beautifully round and reflected on the surface of the water instead of a bar-shaped band of light. What is the difference between drawing a reflection as a band of light and drawing it as a circle?

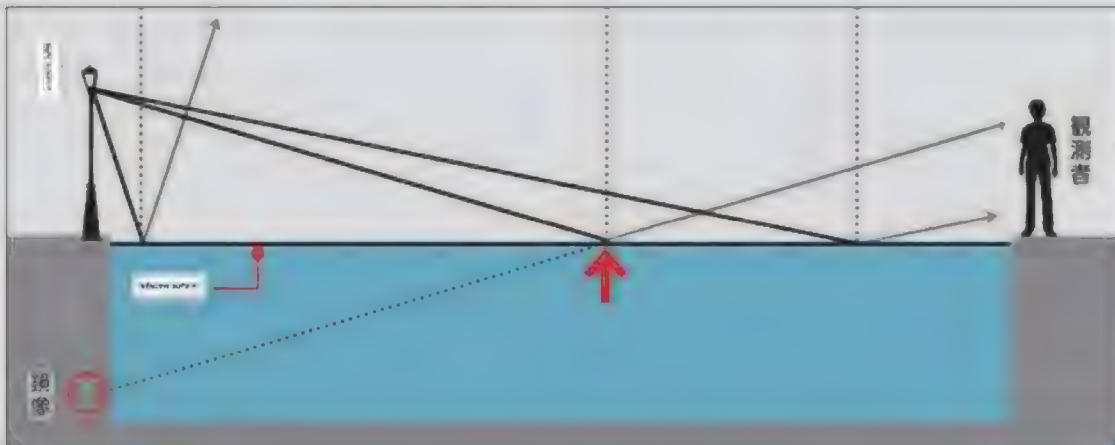
It is the difference in conditions such as whether or not there are waves on the surface of the water. If there are no waves and the surface of the water is flat, the reflection is simply circular;

Also, in the case of asphalt in the rain, the road surface is uneven and has a complex shape, so multiple mirror images are formed in the same way as the surface of water with waves, resulting in rod-like reflections.



When there are no waves on the surface of the water

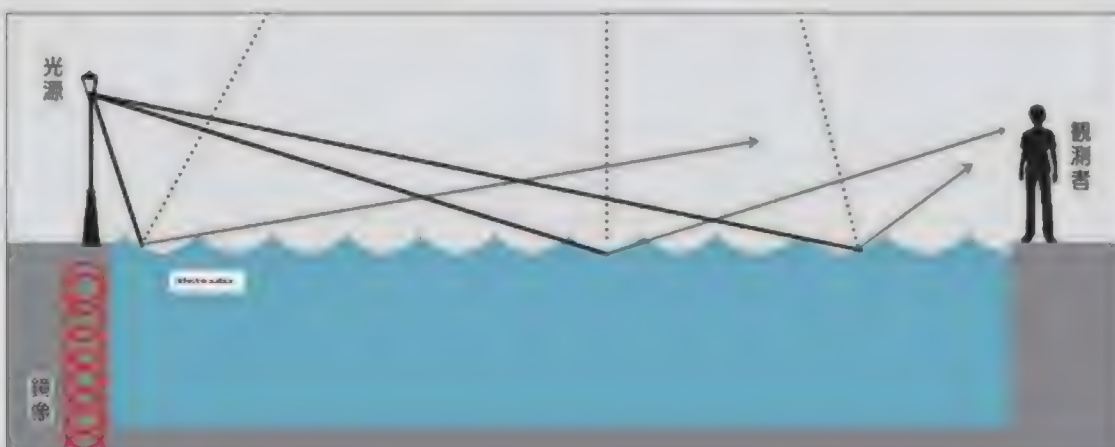
In the case of a flat surface, the light other than the point of the arrow does not reach the observer's eye, so a single mirror image is formed.



When there are waves on the surface of the water

Waves cause the reflective surface to be angled, causing more light to be reflected back towards the observer.

As a result, the reflected light appears as a stick due to the superposition of multiple mirror images





## 04

## Draw the light and shade of the water surface

The water surface in the foreground from the front can be represented by the contrast between the light-reflecting surface and the light-reflecting surface.

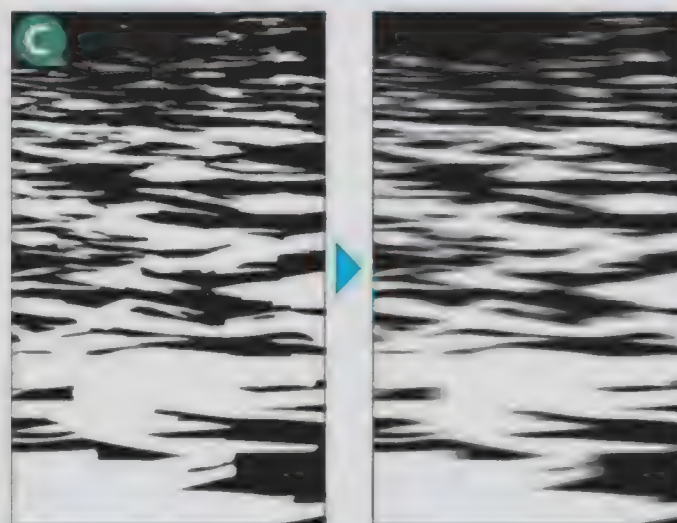
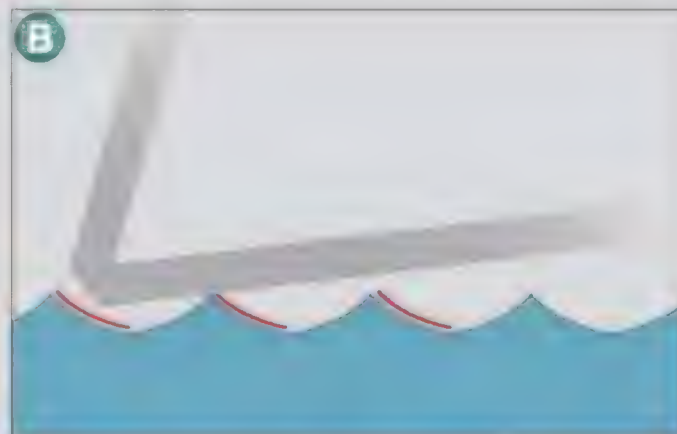
Mountains are formed on the surface of the water by waves, creating surfaces that easily reflect light, such as . This creates light and dark on the surface of the water.

In general, it is easier to adjust the shape of the surface with a pass, and I think it is suitable for drawing the light and shade of the water surface.

However, if you want to draw with a brush instead of a path, the following method will make things a little easier.

Draw a haphazardly bright  
いた後、 area with a brush like ●, and  
use the [Blur (Move)] filter, just as  
I did with "Beach" (p.75). Use the  
filter's "Blur (Move)" to create  
a rough rough sketch.

Alternatively, the background color is changed to black to make it easier to see the changes, but in reality, the parts other than white are

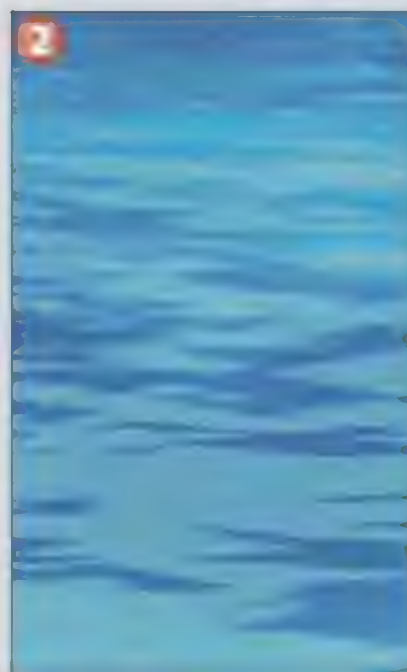
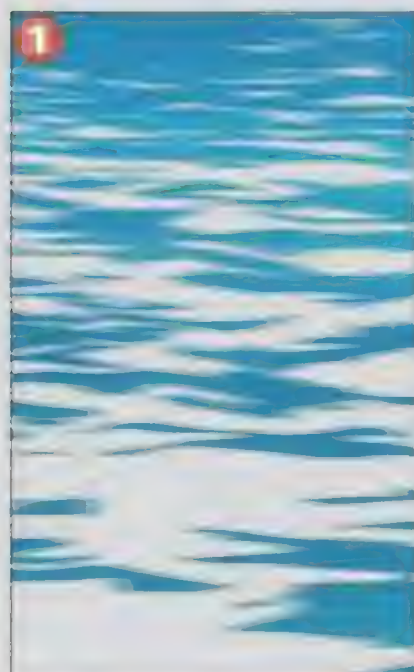


## 05

## Decrease the opacity of the bright side

- This is the state where the layer painted white in step 4 is placed on the water color layer. Depending on the situation, this state may be considered complete. If you want to put a white color in the screen and make a clear picture with a difference in brightness, it may be more effective to leave it as is.

- (2) Lower the layer's [Opacity] to make it blend in.



You can see through the water below your feet, but the water surface in the distance reflects the sky and mountains, making it difficult to see underwater

Considering this relationship between the object and the observer, we have the following can be summarized in

- For distant objects, light with a large angle of incidence reaches the observer's eyes

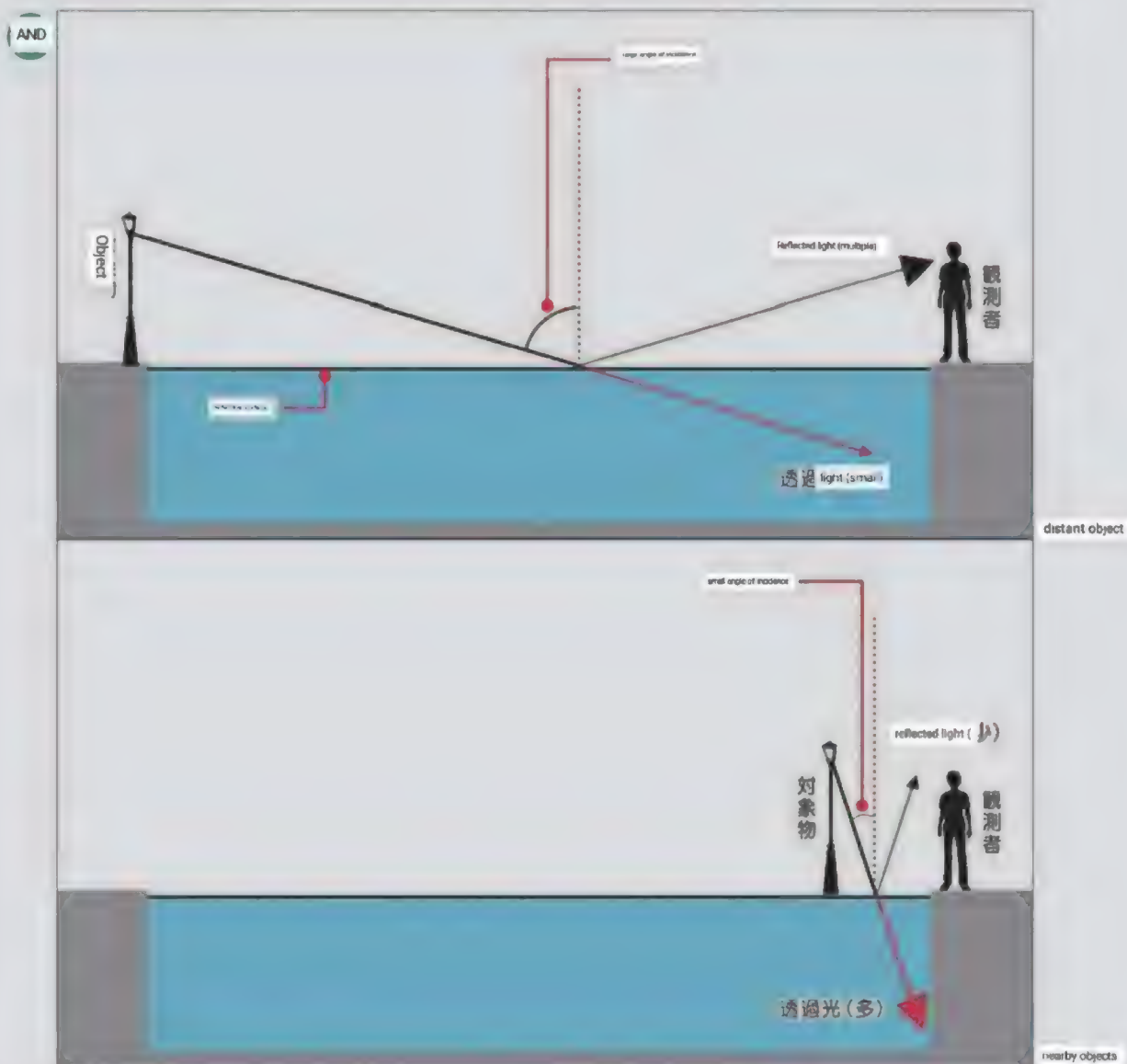
- For nearby objects, small

incident angle of light

- Larger angles of incidence result in more reflection and less transmission

- When the incident angle is small, there is little reflection and there is much transmission

It is good to remember that this phenomenon of reflection at a distance and transmission at a distance is called Fresnel reflection.





# water's edge



Here, we will explain the representation of the water's edge where the water touches another object such as a rock

In the example, I explain the rocks and the water's edge, but it can also be used in scenes where parts of the body, such as the character's feet, are underwater. This section only explains how to express the water's edge, so please refer to "Rocks" (p.44) for how to draw rocks

## paint point

01

### Place a solid layer

- 1 Place rocks.
- (2) Make a solid layer with water color (R70, G165, B255) and apply a clipping mask to the rock layer.



02

### Decrease the opacity of the solid layer

Lower the [Opacity] of the solid layer so that you can see the state of the rock.

I will give you



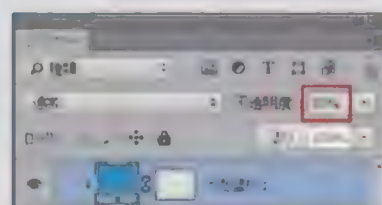
memo

### fill layer

Unlike a normal layer, a solid layer can only be drawn with a brush on the mask, so it has the advantage of not accidentally painting or erasing with the wrong color. You can avoid the mistake of erasing the color of the normal layer itself when you intended to erase it with a mask.

"Layer 1 of the heart" is a normal layer, and the layer below "Fill 1" is a solid layer, but as shown in the figure, the thumbnail image of the layer is different from the normal layer. Also, when creating a solid layer, the layer - mask is automatically generated.

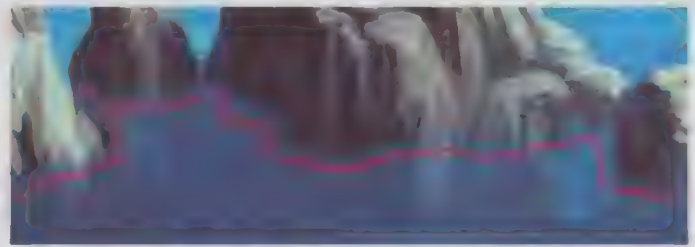
To create a fill layer, select [Fill] from the [Adjustment Layer] icon in the [Layer -] window, or select [Layer] [New Fill Layer] → [Fill] from the menu [ can be created by



Draw the water's edge by partially erasing the layer mask of the solid layer. I want to note here



If you erase with a straight line, the three-dimensional effect will be lost. Erase the cross section of the rock on the water surface.



#### Advantages of layer masks

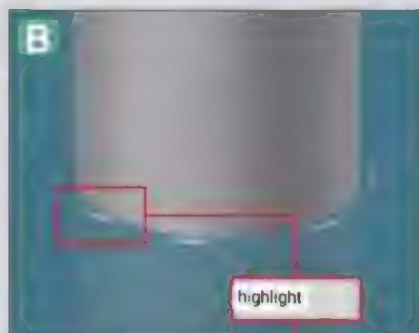
Layer mask is a function that can partially hide the target layer. Areas of the mask painted white are visible, and areas painted black are hidden. A layer mask is used to partially erase a solid layer, but a layer mask can also be used conveniently on a normal layer. When retouching a normal layer with different opacity etc.

I think in order to pick up the same color when changing the blending mode or opacity of the layer, once the original color is displayed and the color is picked up with an eyedropper, the blending mode, opacity, etc. must be restored. However, with a layer mask, you can erase the mask by painting it with black, and you can paint it with the original color by painting it with white, saving you the trouble of picking up the original color.

#### draw border highlights

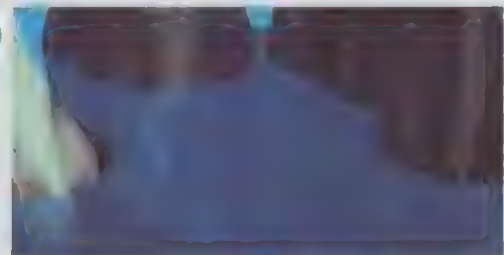
Draw highlights on curved areas such as corners. The edge where the object is immersed is bent into a corner by surface tension, making it easier to highlight.

C is a side view of B. In this way, there is a very small distance between the corner where the highlight is placed and the actual contact between the object and the water. For this reason, if you place the highlight slightly away from the object submerged in water, it will give a realistic water effect. However, since this is a very small distance, you may omit this gap if the subject is not in the foreground or if it does not match the picture.



You don't have to draw the highlight of the boundary, so it's okay if there are parts that are not drawn at all, such as .

D



#### COLUMN

#### create a layer mask

A layer mask is automatically created when creating a solid layer, but for a normal layer click the red part of to add a layer mask. When you add a layer mask, a thumbnail of the layer mask will appear in the area circled in red. By clicking on this thumbnail you can choose to draw on a normal layer or a layer mask. The selected one will be framed.





# Skillup layer comp

## 01 What is layer comp?

The background of the game is the same, such as adding food stalls to the background of the shrine to make it the background of the shrine during the festival, or adding balloons and signboards to the hallway of the school to make it the hallway of the school festival. I often express various scenes by changing a part of the picture. These different versions of the picture are called diffs.

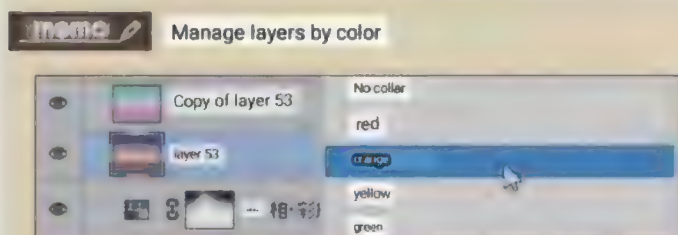
A difference that changes only during the time of day, such as evening or night, is called a time difference. At this time, if you make a separate psd file for each time difference such as daytime, evening, night, etc., you have to add the same correction to all files when correcting a place that is not related to time. Since that is troublesome, instead of making a separate file for each difference, switch the difference only by showing/hiding the layer in one psd file.

However, remember the layer to be displayed for each difference

is hard. Layers can be managed by color-coding with layer properties like memo, but if the number of layers increases and the composition becomes complicated, you will have to manually switch the visibility of layers for each difference, which can lead to mistakes. easier.

That's where the "Layer Comp" feature comes in handy. Layer comp is a function that can memorize the state of layers, and is quite useful for the above-mentioned difference creation work.

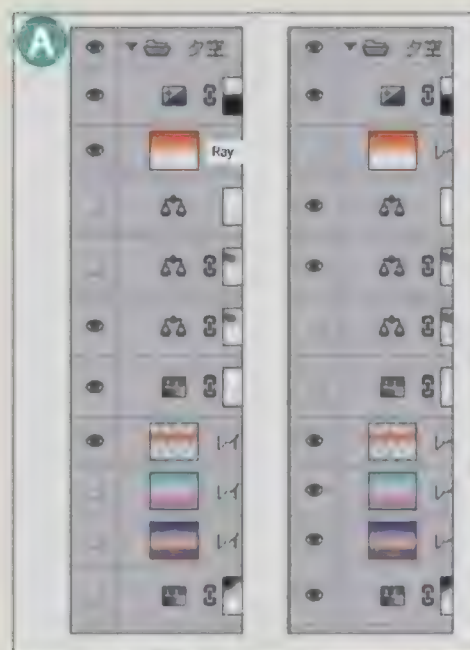
A, the layers displayed on the left and right are different, but the layer comp function can save the display/non-display state of these layers. You can easily switch between the two display states.



Right mouse click (secondary click to select color) on the layer you want to color



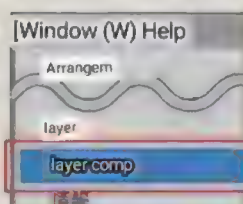
Color the layers. By assigning a color to each difference, such as orange for the evening difference and blue for the night difference, you can color-code which layer is used for which difference.



Difference between showing and hiding layers

## 02 Display the layer comp window

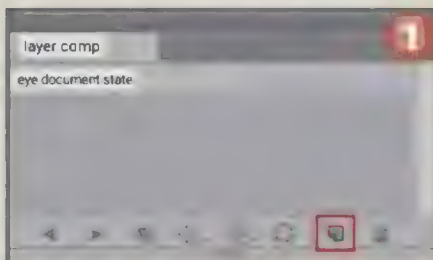
Select Window > Layer Comps from the menu to display the Layer Comps window.



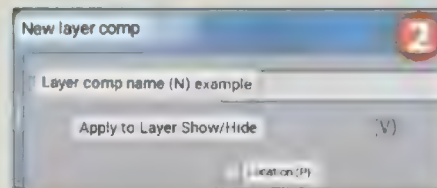
## 03 Create a layer comp

① [Create a new layer comp]

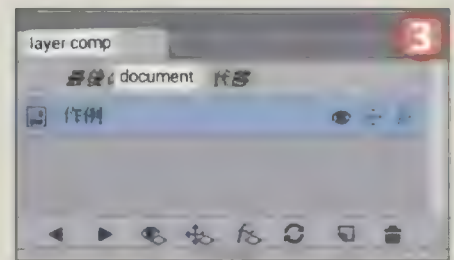
click the button.



(2) Enter a name for the layer comp and press [OK].



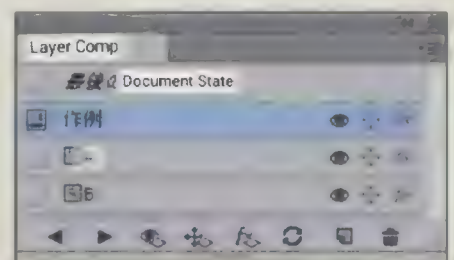
③ This will create a "example" that memorizes the current display state of layers.



## 04 Create a layer comp for each difference

Create a layer comp by switching the layer state for each difference.

vinegar



## 05 Switch layer comps

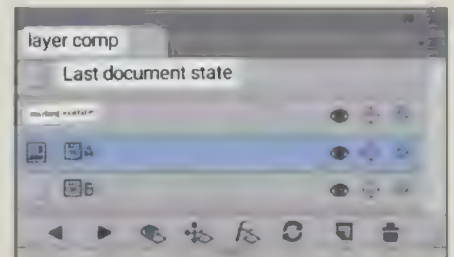
If you create a layer comp

By clicking on a part, you

can switch to display that layer comp. As shown in the

figure below, to change the color of the sky, you have to change

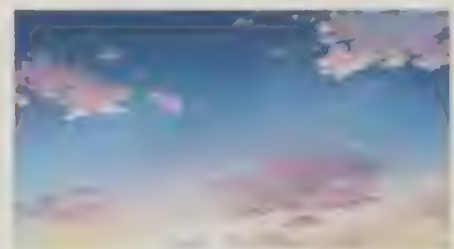
the visibility of multiple layers, but since you are making a layer comp, you can switch to each state with one click.



Layer Comp "Sample"



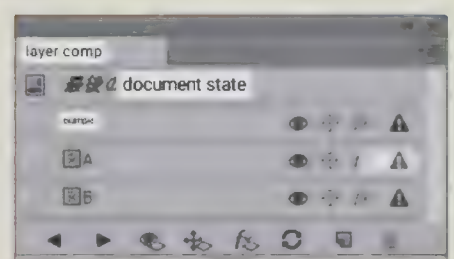
Layer Comp "Figure A"



Layer Comp "Figure B"

## 06 How to remove the warning icon

If you delete or merge layers, and the layers that existed when the layer comp was saved are lost, the icon will be displayed because that layer cannot be reproduced. To remove it, click this icon and select Clear. Or you can also press the button to update the layer comp to make this icon disappear.





# Skillup Draw water droplets

## 01 draw water droplets

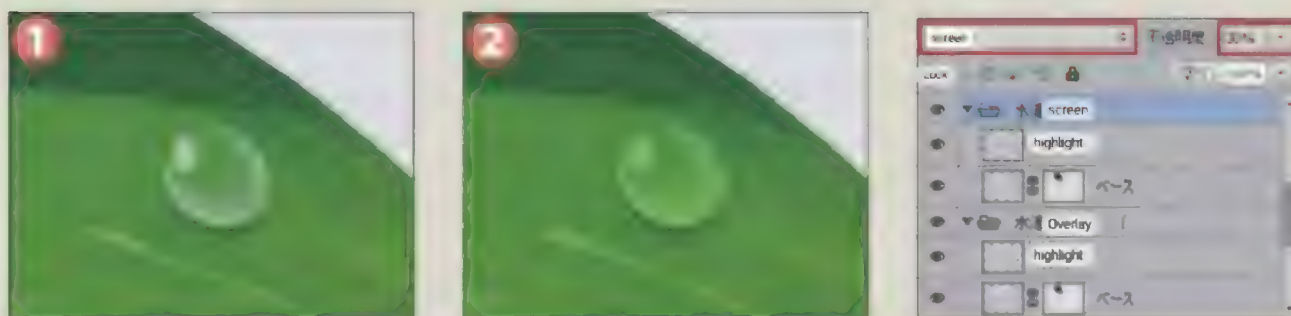
Here, I will introduce how to draw water droplets that can be used for close-ups of leaves in the foreground. By the way, just because it's wet doesn't mean But drawing a spherical water drop like this is a mistake. Draw water that spreads flat except for areas with high water repellency.

- Draw the base layer.
- ② Create a layer mask and erase the center with a large bokeh brush.
- ③ Lower the [Opacity] of the layer to "70%".
- ④ Draw the highlights on a new layer and lower the layer's Opacity to 70%.



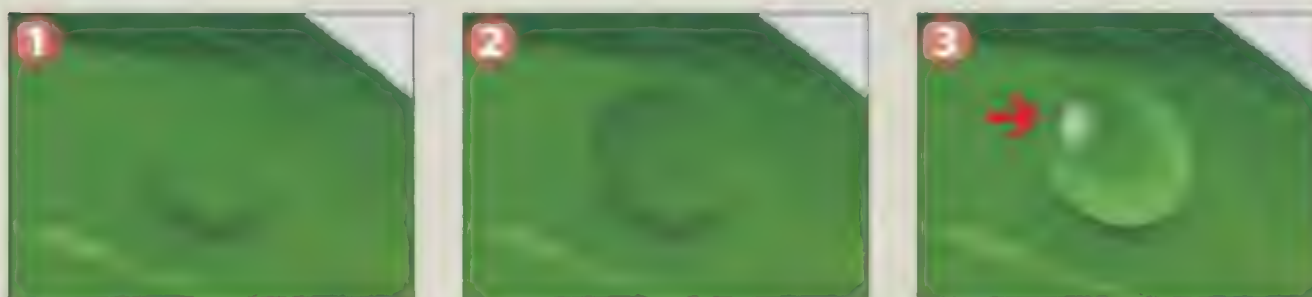
## 02 Place a drop of water on the leaf

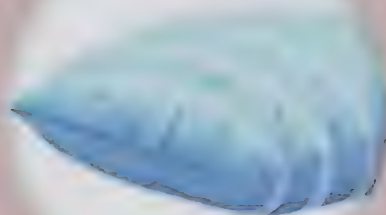
- ① It is just a state where 01 water droplets
- ② are placed on the leaf. Change the blending mode to blend the colors. First, in order to make it easier to correct the shape and position of the highlights in 01, I put the highlights on a separate layer, so I put them together in a layer group. Then set the layer group's blending mode to Overlay. Then duplicate the layer group, set the blending mode to Screen, and lower the Opacity to 30%.



## 03 Draw shadows of water droplets

- ① Create a layer and draw the shadows of water droplets with a large bokeh brush.
- ② Select the area on the base layer of water droplets and paint with a large bokeh brush so that it becomes a gradation from the upper left.
- ③ Finally, repaint the center of the highlights that became lighter with 02 with white to complete.





## Indoor edition

### sanyo room

rug

tv set

low board

low table

downlight

ceiling light

mirror

office chair

PET bottles

sofa

cushion

clock

picture frames and paintings

窓

curtain

### times school

school chair

school desk

blackboard

lectern and podium

黒板

黒板消し

黒板筆

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

黒板消し

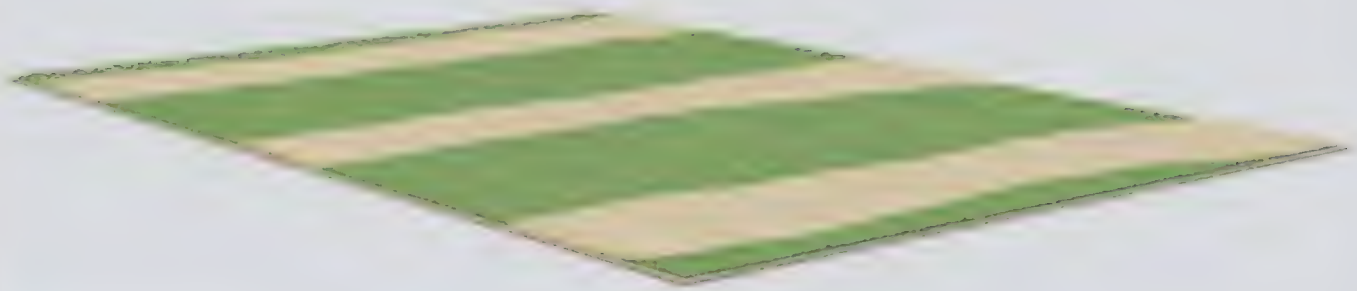
黒板消し

黒板消し





# Easy



A rug is a rug with a size of about 1 to 3 tatami mats and is used in front of the sofa in the living room. If it is larger than a rug and covers the entire floor, it is called a carpet. Items smaller than a rug and smaller than 1 tatami mat are called "mats" such as entrance mats. Here, I will explain how to draw a rug with pile.

## paint.point

01

### draw a planar rug

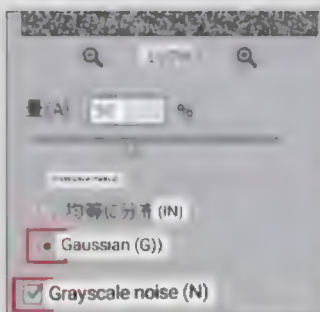
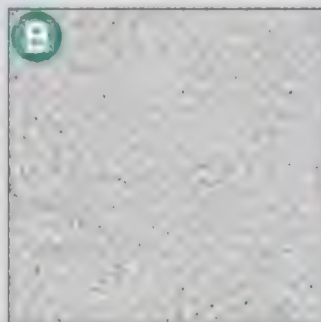
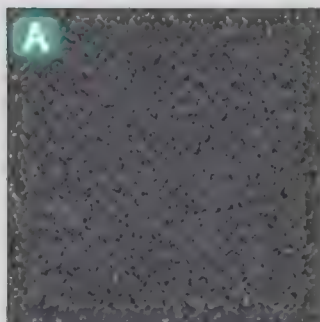
- 1 Here we paint the rug pace with green (R147, G170, B94) and light powder (R244, G221, B165).
- 2 Draw the pattern of the rug in white.



02

### give a rug texture

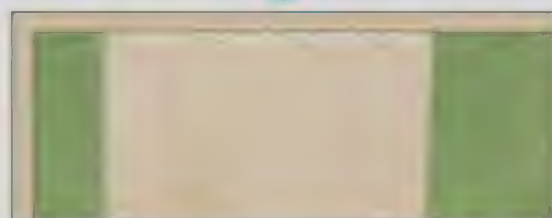
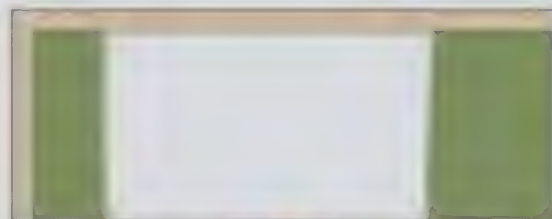
Creates a rough texture. Create a solid gray layer (R70, G70, B70), select [Filter] → [Noise] → [Add Noise] from the menu and check [Grayscale Noise]. Blur the layer with [Filter] > [Blur] > [Blur (Gaussian)] to create an image like this.



Then from the menu do Image > Tonal Correction > Gradation | If you move [Ida] to the left to the center of the histogram peaks and make it brighter, texture B with a rough texture will be completed.

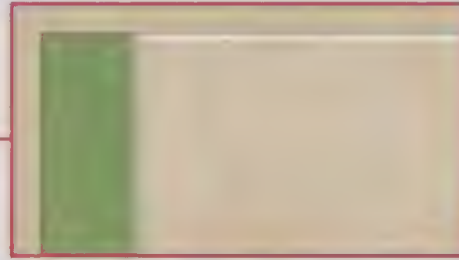
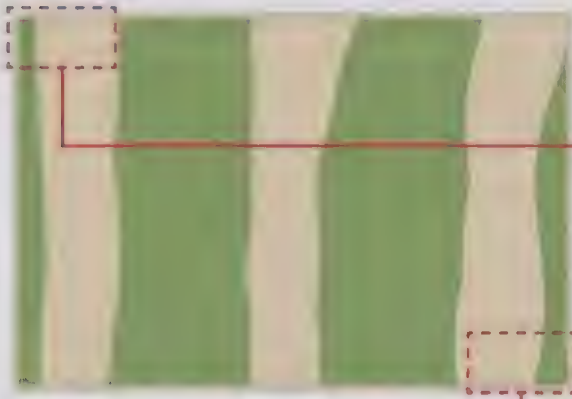
Apply a rough texture to create a rug texture.

Use this layer with the blending mode set to Divide. Select the white part of the pattern, and match the border color with [Hue/Saturation] on Adjustment Layer 1.



03

draw thickness



The left and top will be in the back when deformed, so the thickness is not drawn



The right and bottom will be in front when deformed, so draw the thickness

04

Transform the pattern to match the base

One thing to keep in mind when adding a pattern to a rug is that the pattern will also be deformed.

It means to let it go and put on a verse. If it is a

pattern with a lot of straight lines like this example, I don't think I would leave it without a perspective, but even if it is a circular pattern such as the polka dot pattern as shown in the figure, it can be used on a plane

Leave the texture as a rag in the form of a clipping mask

It's NG if you just do it. I need to use

the Free Transform feature to fit the texture to the shape of the rug and put it in perspective.



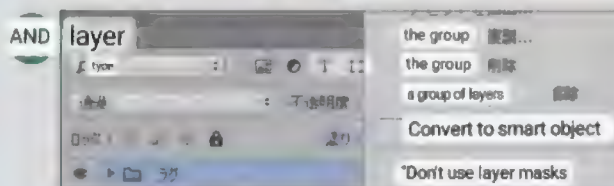
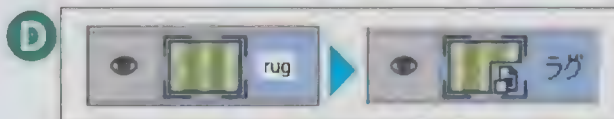
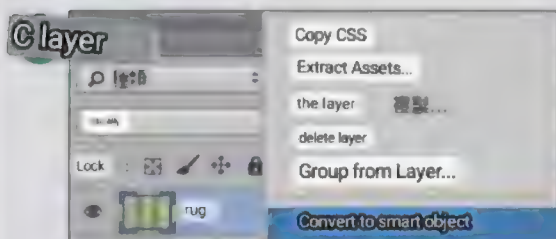
Deform the texture into a perspective rag shape



Lags created by planes are transformed with the Free Transform feature. Before we do that, we convert the rug layer to a smart object. Normally, if a layer that has been shrunk once is enlarged or transformed again, it becomes blurry and unusable. However, if you save it as a smart object, you can always change it by transforming it or applying a filter.

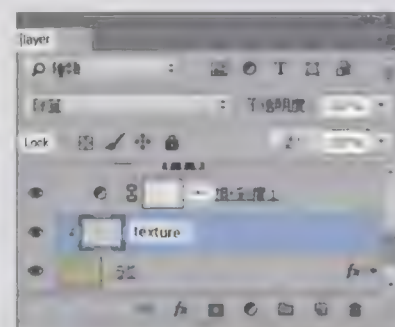
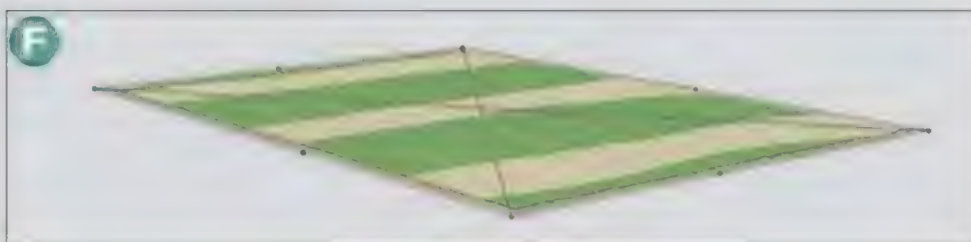
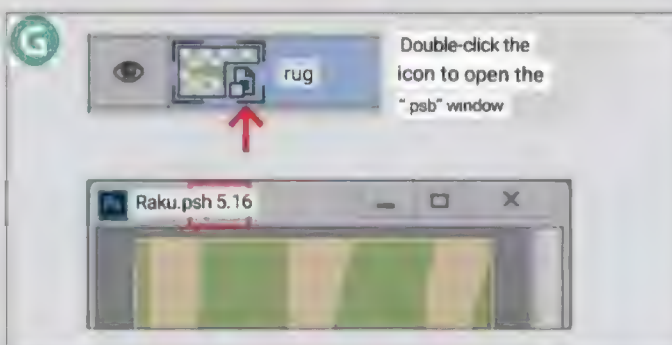
However, it is convenient because it can be restored to its original state.

Right-click (secondary-click) the layer and select [Convert to Smart Object] to display the Smart Object icon in the lower right corner of the thumbnail. Layer groups, not just one layer. Each can also be a smart object.



After transforming the rug layer into a smart object like , double-clicking the icon of the smart object opens the image before transformation in a window with the extension ".psb". If you change the pattern of this "psb" plane image and save it, the pattern of the transformed image will also be replaced.

It is convenient to make Smart Objects for objects that are likely to be modified after transformation so that you do not have to re-transform to the same shape later.



The smart object file itself called ".psb" can also add layers and create adjustment layers just like a normal ".psd" file.

## 07

## add a shadow

Make a selection in the shape of the transformed

lag layer and create a new fill layer with shadow colors (R115, G115, B170). Set the layer's [Opacity] to "65%" and shift it with the [Move tool] to create a shadow.



Range selection in the shape of the layer

By clicking the layer icon while pressing [Ctrl], the area can be selected in the shape of the existing layer.

I can do it.



## 08

## draw pile

Depending on the type of rug, 7 is completed, but in the case of shaggy rugs with long pile, the pile is drawn.

Pile is drawn not only on the edges of the rug, but also on the boundaries of the color of the pattern. Conversely, if you draw a pile on the edge of the rug and the border of the handle, it will look like it without touching the rest of the large surface.



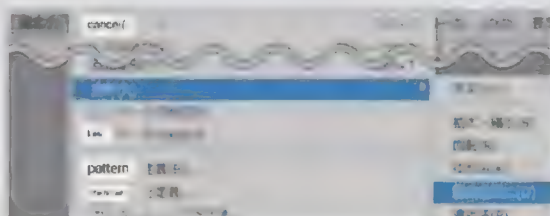
## COLUMN

## Smart objects can be freely transformed since CS4

Smart Objects up to Photoshop CS3 cannot be deformed according to the perspective, so it is difficult to use for drawing backgrounds. Since CS4 and later smart objects can use the [Free Transform] function, it can be used quite usefully as introduced in 0506.



Until CS3, smart objects cannot be transformed with [Free Shape]. It can only be deformed in parallel as shown in the figure.



[Edit] -> [Transform] [Freeform]



From CS4 onwards, Smart Objects can be transformed with [Free Shape], and can also be transformed according to perspective.



# tv set



Until flat-panel TVs such as LCD TVs and plasma TVs became popular, TVs used to be deep and thick CRT TVs. The penetration rate of flat-panel TVs was about 75% in 2010 and over 95% in 2014, so here I will explain how to draw flat-panel TVs. If the time period is before the early 2000s, it would be better to draw a CRT television.

Also, if you change the size of the PC display, you can draw in the same way.

## how to draw screen

### 01

#### tv size

The screen ratio of old CRT TVs was 4:3, but today's flat-screen TVs are 16:9. A 32-inch flat-screen TV is about the size of a sheet of newspaper, including the width of the frame (about 10cm).

The number 32 means that the diagonal is 32 inches (approximately 80cm) and V is the V of VisualSize.

In a 16:9 screen, the size increases to 37V to 42V for each 11cm left and right and 6cm up and down.

By the way, the 32-inch CRT TV

Because the part hidden in the frame is included due to the size of the tube itself

Additionally, the visible screen is smaller than 32 inches.

On the other hand, the VisualSize of a flat-panel TV is the size of the screen that is actually displayed.



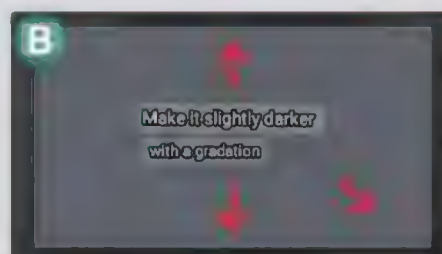
### 02

#### draw a frame

Draw a step between the frame and the screen. Add dark lines to the top and left (side of the light source) and light lines to the right and bottom (opposite to the light source). This makes it possible to express that the screen is slightly recessed from the frame.

Next, with a large bokeh brush, make vertical strokes in the center of the frame to create a gradation. Lightly paint the lower right side to add a faint gradation.

Figure As you can see, the gradation should be very thin, so that you can't tell where it is at first glance.



03

## Differentiate between glare and non-glare

Screen surface treatments include glare (glossy) and non-glare (matte). The glare screen has a glossy finish, so the boundaries are sharp.

If the screen is non-glare, on the contrary, it does not reflect much, and the gradation is done with a large bokeh brush.



Glare (gloss)



Non-glare (matte)

04

## Draw a non-glare screen

- 1 Stroke vertically with a large bokeh brush to create a gradation create a session.



(2) Darken the color of the screen.



- 3 Add a bright gradation on the left side with a large bokeh brush.



If you do not use a brush with a large bokeh like in the NG example and paint over it, it will look like a blackboard.

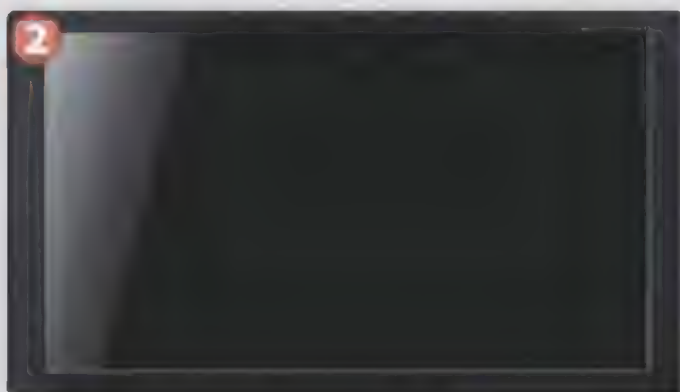


05

## draw glare screen

- Use a brush with a smaller bokeh than when using non-glare to draw the reflection clearly.

- (2) Make sure that it does not protrude from the layer with a clipping mask, etc., and blend in by painting in gray (R50, G50, B55) with a large bokeh brush.

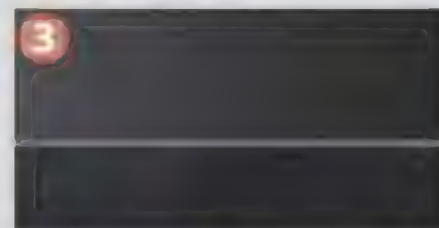
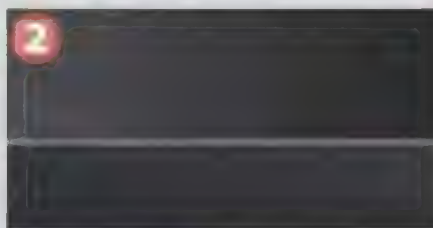
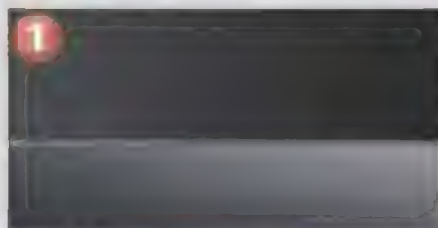




- Create a layer that is filled with white, and use the eraser tool with a large bokeh edge to thinly erase the layer to create a gradation.

- ② Set the layer's [Opacity] to "25%" to create a faint gradation.

- (3) Express the reflection of glare by breaking the gradation. non-glare Complete with 2 if you like.



Draw the logo of the manufacturer, the logo of the product name, etc. Unless it is a very close-up view, do not write the characters clearly.

It would be better to draw something that looks like a sloppy letter.



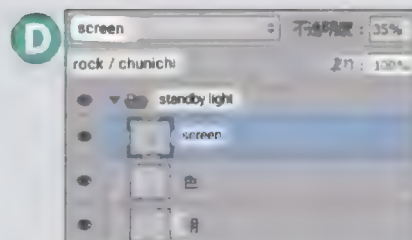
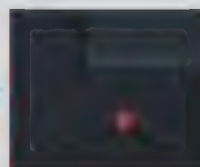
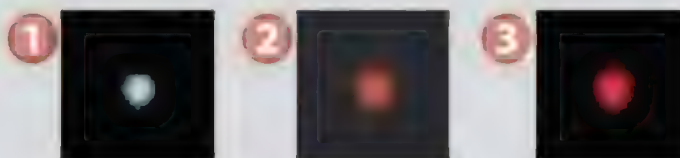
③ Draw the image receiving lamp at the bottom like . Daytime In this case, it doesn't stand out, so you don't have to draw it. Light up the standby lamp for night scenes. Lighting is drawn in the following three steps.

- ① Create the first layer (light layer) and fill it with white.
- (2) Create a second layer (color layer) and paint red with a brush whose [Opacity] is lowered (the layer's blending mode is [Normal]).

- ③ Create a 3rd layer (screen layer) and draw a red blurred circle with a single click with the large Poké feet brush. Set the blending mode to [Screen] and set the [Opacity] to about 35%.

That's all there is to it. Consists of 3 layers like

will be



09

Transform according to the bath

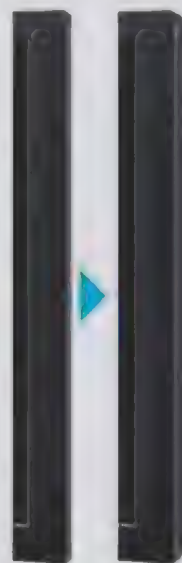
match the perspective to transform the Free Transform feature.



10

draw the side of the tv

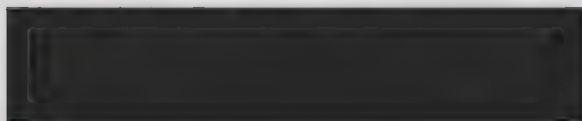
If you just deform the flat screen, the thickness of the TV will not be there, so draw the thickness of the sides.



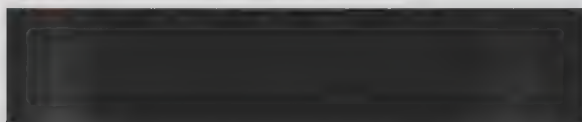
11

draw a tv stand

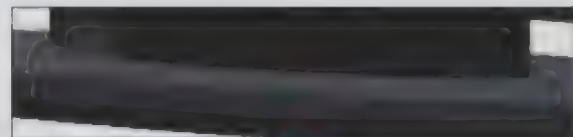
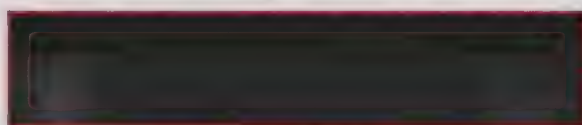
●Base layer for the neck of the stand.



2 Draw vertically with a large bokeh brush.

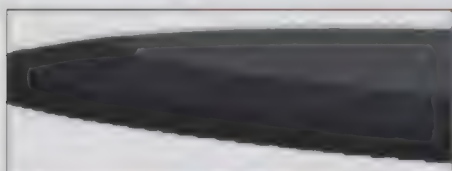


3 Darkens the area just below the TV screen with a drop shadow.

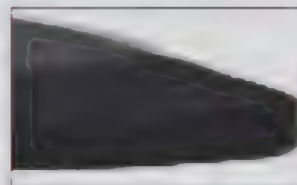


Darken the top surface of the stand with the specular

200% Opacity, 100% Noise



Select the upper surface of the stand and click the large bokeh brush on the left side of the upper surface of the stand once to add gradation.



put a highlight



# low board



A low board is a piece of furniture such as a low shelf, and a typical example is a TV stand. There are some types of lowboards that do not have legs, but if they do have legs, there are some things to keep in mind, so I chose this as an example. The size varies depending on the product, but the example is about 40 to 50 cm in depth and height and 120 cm in width. This is the perfect size for sitting on a chair or sofa. Wooden furniture such as bookshelves and chests of drawers can also be drawn using the techniques introduced here.

## Drawing point

01

Draw a rectangular parallelepiped hit to the contact surface of the leg

By drawing a rectangular parallelepiped that touches the ground and taking a hit, you can accurately position the legs even if they have legs. If you line up the legs without making contact with the ground surface, you are more likely to make mistakes such as making the back leg longer as shown in the NG example.

of



The back leg is too long considering the hidden length



## paint point

02

draw the difference

It is important to be able to clearly distinguish the differences. For that reason, we change the brightness and saturation without making the color of each side exactly the same.

**A** , the color of the top surface and the front surface is the same, so the difference between the surfaces cannot be seen. The corner highlights barely represent the difference between the faces.

However, since it relies on the highlights to distinguish between faces, you cannot remove or lighten the highlights.

**B** You can see the difference between the sides because the saturation and brightness are different between the top and front sides. However, since it is a single color, it gives a hard impression as a picture.

**C** By adding a gradation that brightens the foreground and darkens the background, the hardness of a single color is eliminated.

A

of



B



A LOT



Use a brush (p.50) that can remove the wood grain and draw a straw vertically.

click to draw. Instead of spaced evenly, create gaps or overlap. Set

the blending mode of the wood grain layer to [Multiply] and

Lower the Transparency below 50% to thin it out and put it on the base layer of the board. It is important

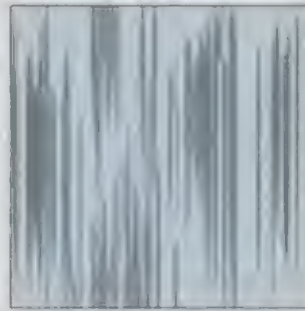
that the wood grain has a gradation in a certain direction.

Of course, you can draw a bamboo shoot-shaped grain like in "Italize" (p.107), but it is easier to draw a straight grain

with a straight grain. As long as you leave a gap and draw a vertical line, you can draw wood grain with the default brush.

If you want to paint even more carefully, you can customize the brush so that it feels like a "Kasure brush" brush.

brush that can be removed



"Haze brush



"Haze" plush

In the NG example, the wood grain continues above and below the horizontal line, so it looks like a single board. Since it is actually two boards joined together, the wood grains must be different. The wood grain is drawn so as to separate it within the range of the board without crossing the border of the board.





## 05

## draw the inside of the shelf

- ① The brightness of each surface is different, making it easier to distinguish between the surfaces.

- (2) Since the back of the shelf will be dark, add a gradation that gets darker toward the back on each side.

- ③ Use method 03 to draw the wood grain on the inside of the shelf as well



## 06

## draw a handle

- It is a base layer. Draw a circle with a dark color. (2)

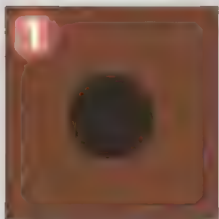
Make a clipping mask on the base layer so that it does not stick out, and click once with a large bokeh brush. Move the clicked position slightly to the left (light source side) from the center of the circle.

- ③ Draw highlights. Using the same large bokeh brush, select a lighter color and click once

To do. I want to make the size of the circle smaller than in

2. So make the brush size a little smaller.

- ④ Draw the shadow of the handle. Select a dark color, create a layer below the base layer, and click once on the bottom right of the base layer (opposite the light source) with a large bokeh brush.



## 07

## draw a highlight

- This is the state before highlighting.

- (2) Highlight the corners with straight lines. If it is a distant view, you can complete it here. For foregrounds, finish with evenly bright highlights like this one.

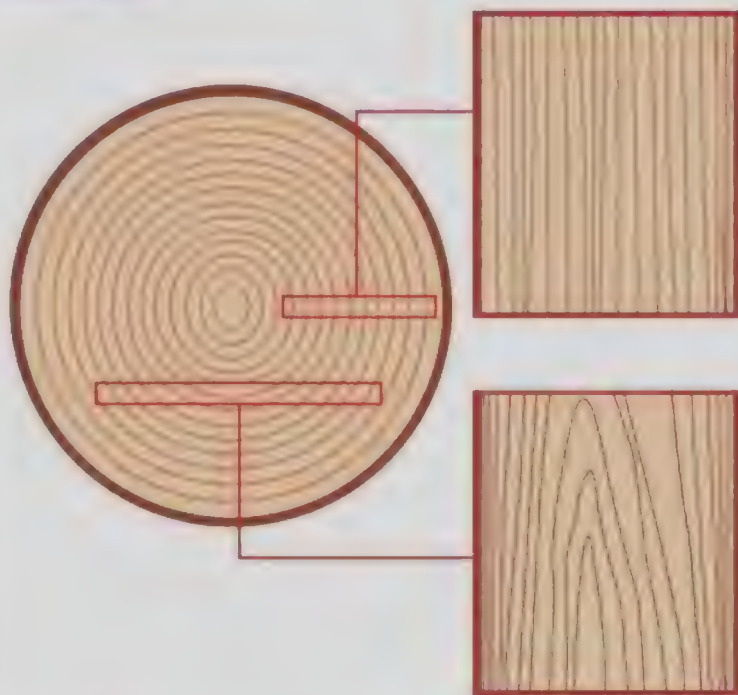
If you wear it, you will get the impression that it is not detailed enough.

- (3) Erasing part of the highlight and thinning or thinning it to create a higher quality highlight expression.



## COLUMN

straight grain and flat grain



直  
木  
目  
grain

If you cut toward the center like when you cut a cake or pizza into equal pieces, the grain will be parallel.

This is called straight eyes.

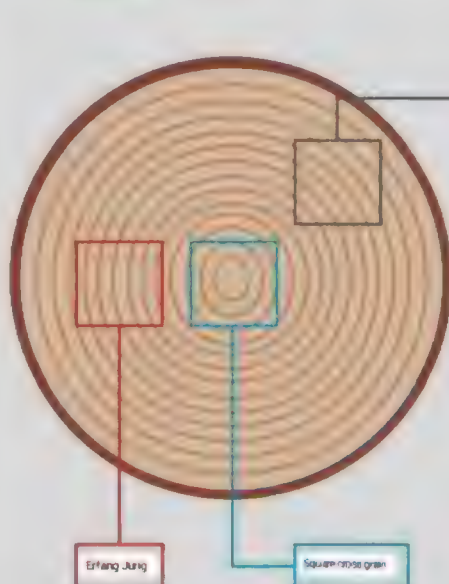
Straight grain can only be used outside the core, so it is expensive because it requires a large tree to make a wide board.

いた  
め  
板  
目

On the other hand, a cross grain is a bamboo shoot-shaped grain that is created when the wood is cut off-center.

## COLUMN

Sifang Jung



四  
方  
柱  
square column

Timber with straight grains on all four sides is called shiho-sama. Shihomasa is used for high-grade pillars.

The red part in the figure is straight grain in only two directions, so it is called a two-sided square, and the blue part is called a four-sided cross grain, because it is cross-grained in all four directions.



# low table



A low table is a classic piece of furniture that you want to put together with the sofa in your living room. The height of the low table should be about the same as or slightly lower than the seat of the sofa (30-40 cm) so that cups and other

items can be easily placed. However, it is not necessarily that size, and there are products with a low size of about 20 cm in height. A low table of about 20 cm has the advantage of making the room look wider, so when you want to create a more stylish room.

You can take

advantage of it. There are various designs, but here I will draw a low table (width 80 cm, depth 40 cm, height 34 cm) with a glass top, a wooden shelf, and steel legs to explain how to paint the glass plate and metal rod.

## Drawing point

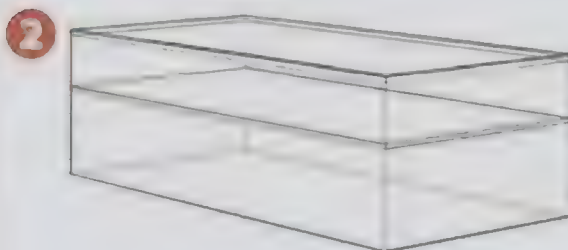
01

Draw a top board by taking the shape of the rectangular parallelepiped

- Draw a cuboid shape.



- ② Draw the top board.



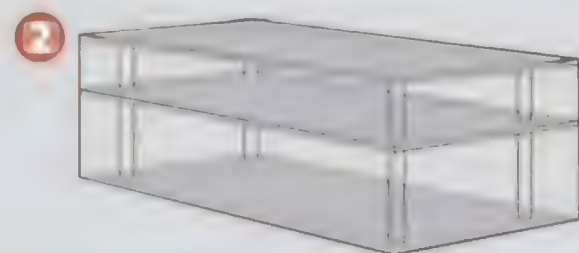
02

Draw the leg cylinder using the guide

- ① Prepare a guide for drawing the cylinder of the leg.

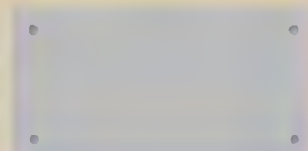


- ② Draw a vertical line to connect the guide circles and draw the legs to come.



## memo Creating a guide material for the legs

Since it is time consuming to align the bases of the 12 circle guides (p.112) one by one, prepare a guide material with four circle legs arranged in the shape of the top plate and transform it to fit the top plate.



# 03

## paint a metal bar

Apply a dark color (R50, G50, B50) with a large bokeh brush in the vertical direction, and use the filter [Blur (Gaussian)] to apply.

② Apply light colors (R205, G205, B205) vertically with a small bokeh brush.

③ Paint white vertically with a large bokeh brush with [Opacity] set to "50%".

④ Bokeh small blur with Opacity set to 50% Apply black vertically with a brush.

5 Apply [Level Correction].

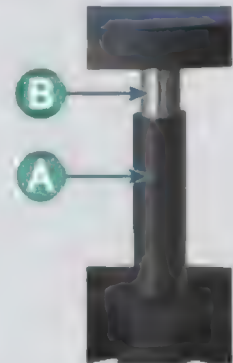


# 04

## The point of being a metal bar

What you need to make it look like metal is thin and clear light and shade like the one drawn in 03 ③. Adding [Level Correction] to increase the contrast between light and dark is the key to making it look metallic.

① is the darkened state of 1 of 3, and the day is the metal bar of ⑤. By using these two properly, you can draw the plastic part and the metal part of the gas cylinder of "office chair" (p.122) separately.



Gas cylinder for "office chair"

# 05

## Duplicate the painted metal bar as a smart object

Once you have one of the metal bars painted in step 3, duplicate it and apply a clipping mask to the other three base layers. Remove the fill layer from the smart object before cloning.

(p.98) will save time when repainting later.



Make the metal bar paint layer a smart object and clip it to the base layer.



Here we will draw a glass top plate.

For details on how to draw a wooden board, refer to How to draw wood grain on a "low board"

When we think of glass, we tend to think of it as transparent, but because silica sand, which is the raw material of glass, contains iron, an impurity, the thicker parts look greenish. However, if you make the green too strong or too dark, I think it can have a bad effect on the overall color balance of the picture. There is also a glass called high transmittance glass with enhanced transparency, so you can use a light color or a whitish color without being too caught up in the green color of the

photographic materials

- Paint the front side of the glass with green (R75, G135, B115) (R60, G100, B85). Change the brightness depending on the surface so that you can see the difference between the surfaces. Paint the back side with white on a separate layer.



- 2 Lighten the [Opacity] of the green front side layer to "50%".



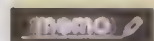
- (3) Select only the upper surface of the glass, and paint a faint white with a large bokeh brush.



Add specular reflections to both the glass and wooden tops. If you draw the wood board as a dull material, you don't need specular reflection.

If you draw bright reflections of light, there will be areas with high brightness,

There is an advantage that the sharpness of the picture is easy to come out. In addition, draw a mirror image of the leg. Duplicate the metal rods for the legs, darken the image, and use a lower Opacity.



Luster expression of diagonal white band

There is an expression to put a white belt diagonally as an expression of shiny things. This is a "promised" expression method, and since it is only inserted symbolically, there is no restriction on where to insert it.

It's convenient, but I don't use it often because it gives a slightly outdated impression in some cases. Since it is a simplified expression, it is effective when the painting style is deformed.



The position does not matter, but depending on the painting style, it gives an old impression

**E** In the arrows, light and dark are separated vertically.

This can be white or bright, such as white wallpaper or windows.

It depicts the change in brightness that can be reflected by objects.

**E** Then assume that there is a window at the position filled in green and put in the reflection.

It draws not only reflections from bright areas such as windows, but also reflections that are darker than the original board color. Here, "Robo



The position to brighten by surface reflection is determined by the position of

I will explain assuming that the code is in the back. A dark color specular reflection is included as shown by the arrow in .

Reflection from the window extends to the front side of the top board, but the low board is discontinued at the position of the arrow. The window is about 2m high, but the low board is only about 40cm high, so the mirror image is cut off at this position.



Considering the range where the image of the object in the back is

reflected, add surface reflection

The reason why the mirror image of a low board about 40 cm high is cut off can be understood by following the procedure for actually drawing the mirror image.

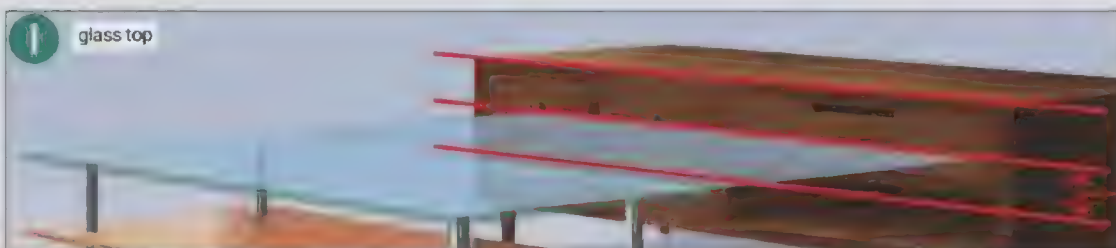
Consider that the surface of the wooden top board to insert the reflection extends to the position of the low board and insert the reflection.

When the low board is turned upside down around the red line in the figure where the extended reflective surface and the object of the mirror image are in contact, it becomes a mirror image reflected on the wooden top board. The reason why the mirror image is interrupted up to the position of the arrow is because the mirror image is reflected in this way.



(Although it is said to flip vertically, it is necessary to not only select [Edit] → [Transform] → [Flip Vertically] from the menu, but also use the [Free Transform] function to transform it according to the perspective).

There is little difference between the height of the lowboard and the height of the glass top, so there is no mirror image of the lowboard on the glass top. If you have a TV on top of the low board, the mirror image of the TV will fit on the edge of the glass top.



Range of mirror image

The image of the low board does not reach the glass top plate



# Downlight



Downlights are lights that are recessed into the ceiling. There is a light bulb behind the hole in the ceiling, but if it's not too tilted, just draw the hole without drawing the light bulb.

A typical downlight has a diameter of 10 to 15 cm. Some reflectors are painted white so that the color blends in with the white ceiling.

Here, I will focus on how to draw a circle, which is necessary when drawing many things, including downlights.

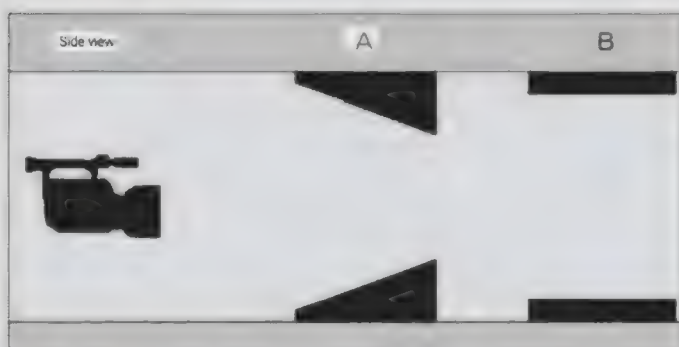
## Points for drawing circles

01

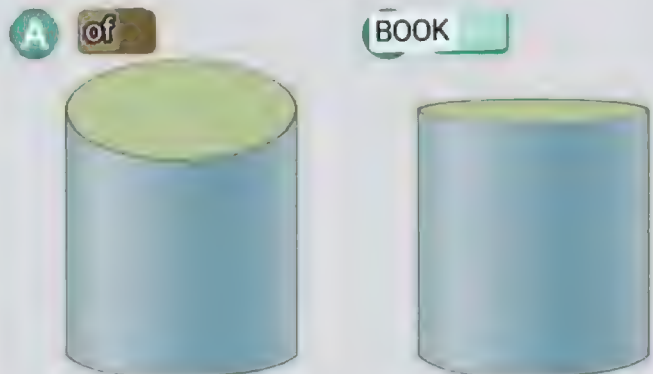
### Points to note when drawing circular objects

A common mistake when drawing circular objects is to draw the circle as if it were tilted toward you. This is a mistake not only for ceiling lights, but also for pots on the floor, trash cans, or any circular object.

You end up drawing something like , which should be drawn like .



You may think that you can't make a mistake by arranging them like this, but it's a surprisingly common mistake. The reason people make this kind of mistake is that they don't know how to draw a circle to match the perspective, so they draw the circle without taking the perspective.



02

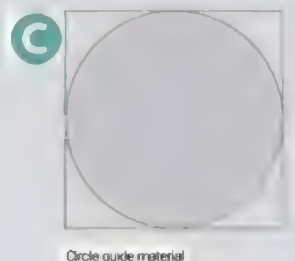
### take a circle perspective

01 In order not to make mistakes like this, I will explain how to take the perspective of a circle. If it is a bookcase that is designed for analog drawing, I will explain the complicated procedure for drawing a circle, but it is extremely simple for digital drawing.

The point of fitting a circle to perspective is to use a square as a reference. Create a circle guide material that draws a circle inside a square. Just like the squares in this material, you can use the [Free Transform] function to fit the circle to the perspective.

Circle guide material does not integrate square and circle, each

Leave it as a separate layer. Then, if you hide the square layer after transforming it like in ①, you can leave only the circular image in perspective.



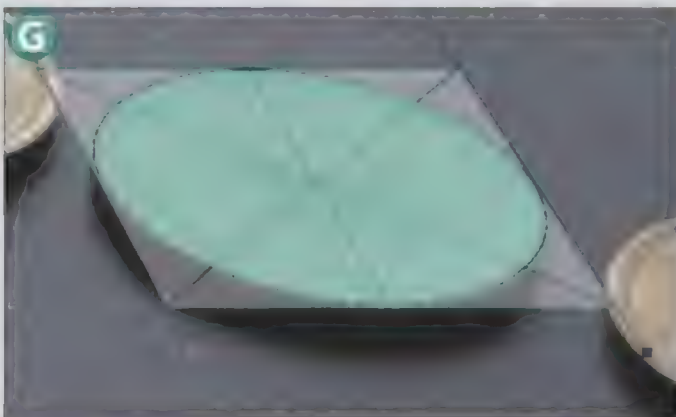
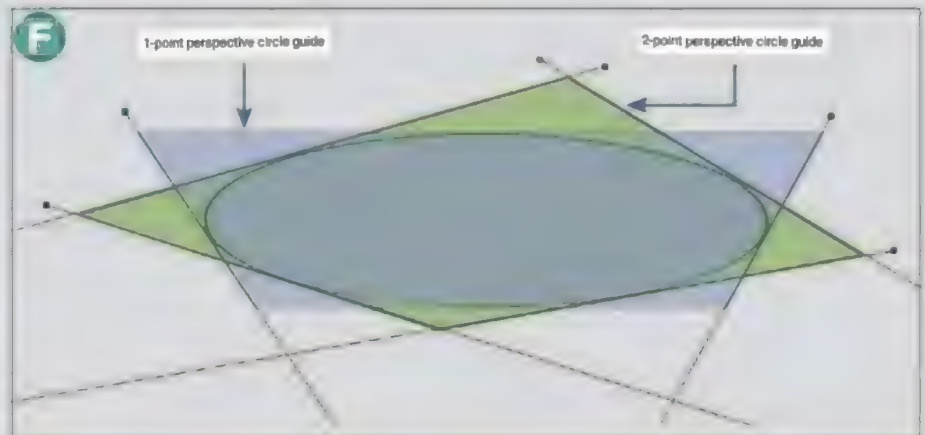
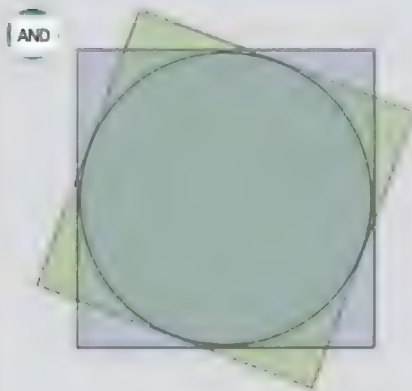
I explained that the circle guide is deformed according to the perspective, but should I consider the perspective when drawing a circle, one-point perspective or two-point perspective?

In fact, if it's circular, it doesn't matter which one. In terms of planes, a circle can be surrounded not only by blue squares, but also by green squares, as in . In the same way, even when perspective is attached, it can be surrounded by squares of any angle.

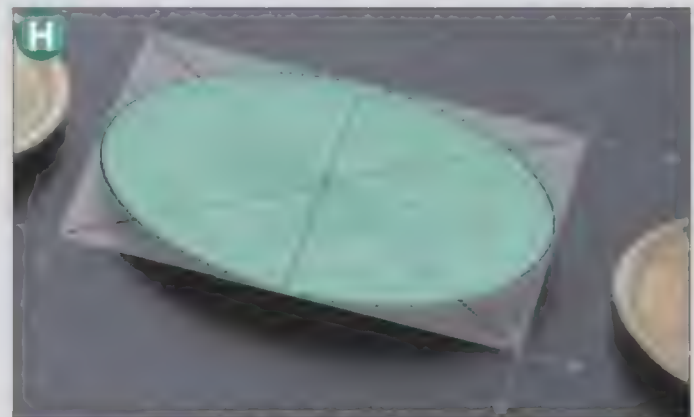
Because of this, I was able to draw guides in

You can perfectly match the circle of the guide drawn with the two-point perspective method.

I think it's logical to understand just by looking at the illustration, but isn't it difficult to be sure that the shape will be the same regardless of whether it is adjusted to a 1-point perspective or a 2-point perspective? Therefore, I deformed the circle guide material according to the perspective of the coin in the photograph taken with the camera, and confirmed 1. 1-point perspective and 2-point perspective, the circular part is the same shape as the coin in the photo. one-point perspective, as in .



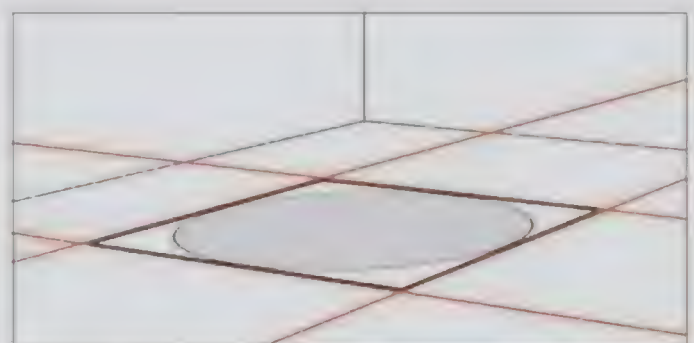
Circular for 1-point perspective



Circular for 2-point perspective

As shown in 03, the circle can be captured at any angle, but in order not to complicate vanishing point management, it is better to use the vanishing points of other objects.

Drawing a circle is, after all, just a matter of drawing a square to match the verse and sticking a circle guide to it.



A circle using the same vanishing point as the wall line



## 05

## add a gradient to the frame

Paint the gradation of the frame part at the plane stage.

Using a large bokeh brush, apply a thin coat with a color darker

than the base, then apply a color lighter than the base

Change to color and paint vertically.

In this example, the downlight is drawn at a short distance.

I added this kind of gradation because I have a lot of

work to do, but in many cases the downlights are drawn

farther apart, so this step can be omitted. In the

case of a distant

view, the frame itself is omitted in the first place.

There is no problem if you just draw the part of the hole.



## 06

## paint a specular reflector

-It is in a deformed state according to the perspective.

The squares used as guides are erased.

2 Use a range selection or clipping mask to avoid overshooting, and paint vertically with a straight line with a large bokeh brush.

3 Draw a vertical line again. Duplicates are fine.

4 Similarly paint with white color with a large bokeh brush.

5 Do the same on the left side. You can copy and transform it. 6 Lighten the lower part of the part painted with white color a little.



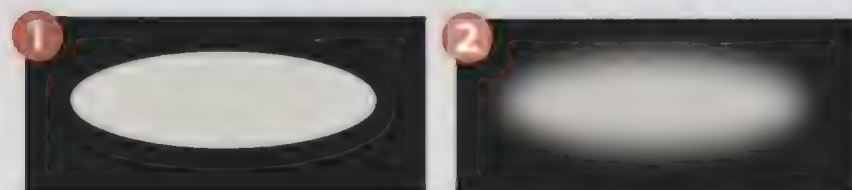
## 07

## light up

Use a clipping mask so that the inside of the hole does not stick out, and select a brush with a large bokeh foot that is about the same size as the downlight. And by clicking once on the top with white color, you can express that the light is on as shown in ①.

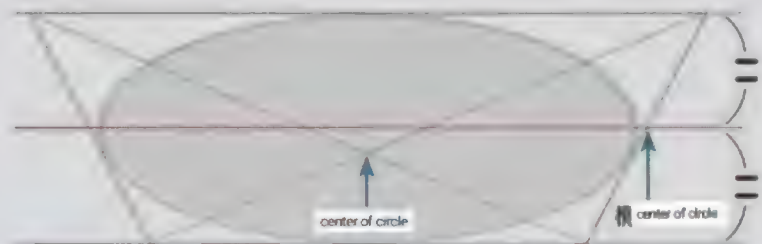
If you want to add more light effects, create a layer filled with white in the shape of a hole, and apply the filter "Blur (Gaussian)" to make it look like that.

increase. By setting the blending mode of that layer to "Screen" and putting it on the image of the downlight, you can make it shine like this. (1) and (2) have a black background to make them easier to see, but the black parts are transparent.



First, read the explanation below.

The red line is the equidistant half of the oval itself. Conversely, the intersection of the diagonals of the circle guide squares will be the center of the circle with perspective. Because of the perspective and perspective, the back is short and the front is long. Therefore, the center of the circle with the perspective and the center of the Kusunoki circle itself will not be the same.

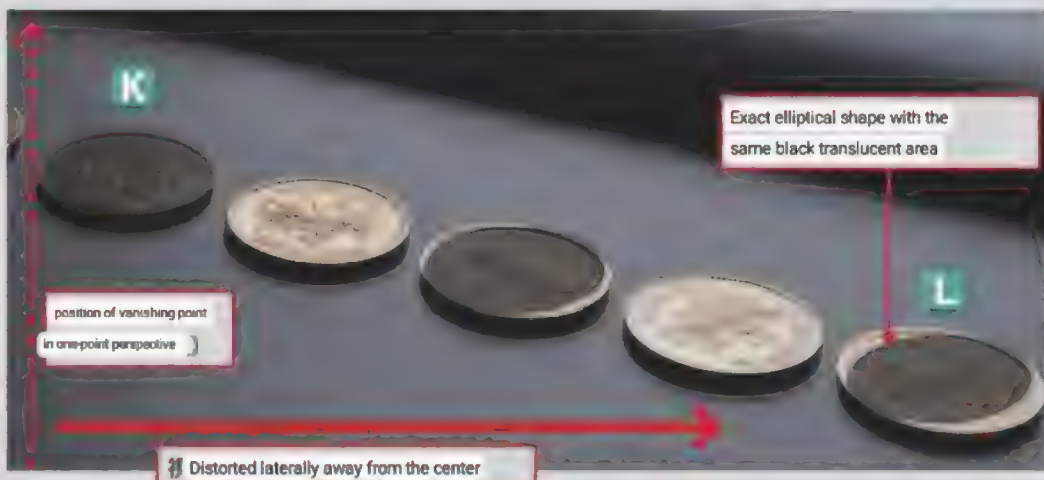


I think this is a very common explanation, but when I read it, I found myself thinking, "Well, the center of a circle and the center of an ellipse are different, but in the end, even when drawing a circle with a perspective, should I draw a normal ellipse?" There is a danger of jumping to conclusions. This figure is elliptical because it is above the vanishing point (center of sight) of one-point perspective, but if the position is shifted in the horizontal direction, it will not be an accurate ellipse and will be distorted.

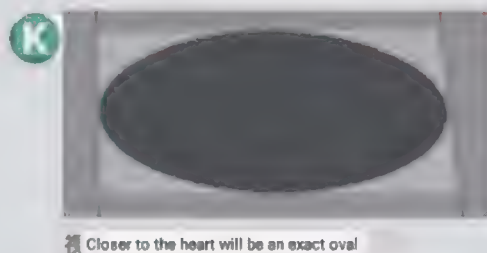
If it is close to the vanishing point (center of sight) of one-point perspective like water, the tilt of the circle guide is almost zero, so the shape is close to an accurate ellipse.

Increase. As shown in , if you move away from the visual center, the circle guide will tilt toward the visual center and the ellipse will be distorted.

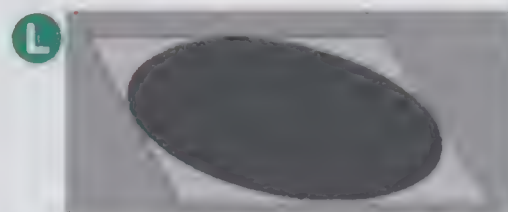
Instead of jumping to conclusions and ignoring the vertices to get an all-exact ellipse, you need to distort the circle guide to match the perspective, resulting in a distorted ellipse (but with an extremely tight ellipse). If the distortion of the circle is too strong in a picture with perspective, and it feels strange, we may take flexible measures such as reducing the distortion a little.)



"The explanation image above is trimmed by cutting the left side for easier viewing. Therefore, the center of the eye is on the left edge. The が、 vanishing point of one-point perspective is in front of the viewer, so the center of sight is the center of the image when not cropped.



closer to the heart will be an exact oval



When moving away from the visual center, it becomes a circular shape distorted in the direction of the visual center



# ceiling light



A ceiling light is a type of lighting that is directly attached to the ceiling, which is familiar in Japanese houses. There are fluorescent lights and LED lights inside, but the actual drawing is the milky white acrylic cover on the outside. There are also covers with frames and square products, but here we will use a circular ceiling light (50-60 cm in diameter and around 10 cm in height) as an

example

## paint:point

01

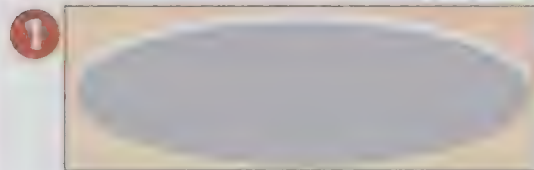
Make the thickness of the side of the cover

First create a circle. See "Downlight" (p.112) for how to draw a circle that matches the perspective. Duplicate the created circular layer and shift it vertically to create thickness.



## 02 Paint the gradation of the lamp cover

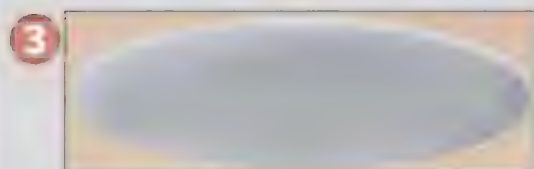
- Fill with gray (R207, G209, B209).



- ② Use a color (R170, G170, B185) slightly darker and more purple than the base gray and paint the outside with a large bokeh brush.



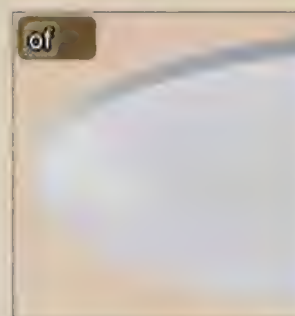
- ③ With the same big brush on the poke leg, paint the outside with white this time to create a gradation.



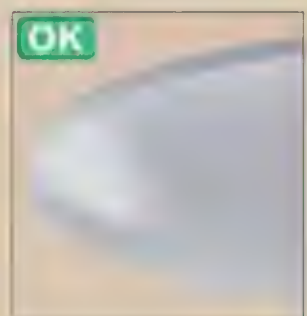
memo Do not make the lamp cover too white when it is turned off

The point when drawing a ceiling light that is turned off during the day is to paint it dark.

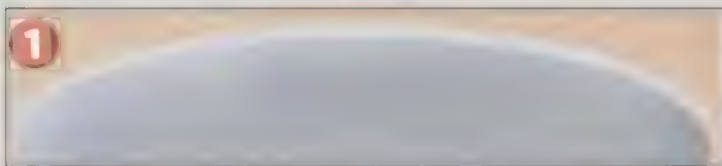
Since the cover of the ceiling light is white, I want to make it brighter white. Of course, if the lights are on, don't worry about the highlights and leave them white.



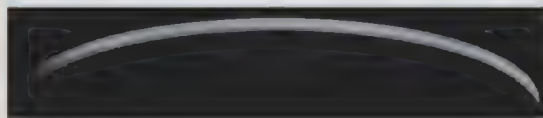
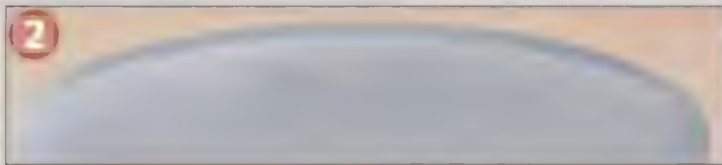
can't see the highlights



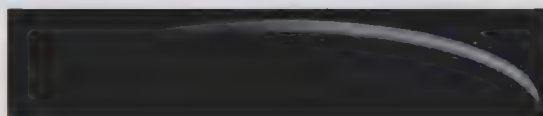
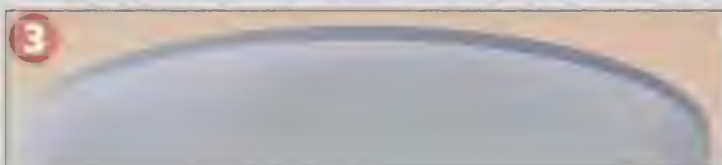
① This is the state before painting the sides.



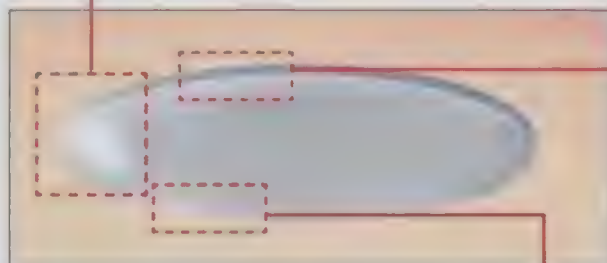
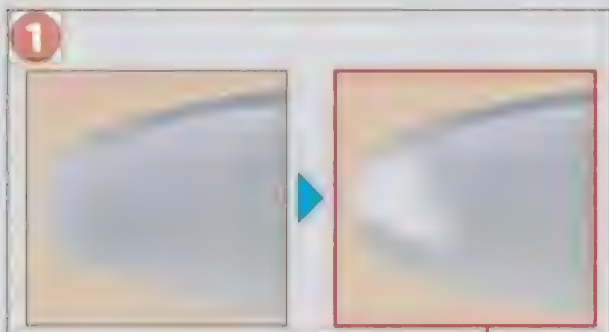
② Paint the unpainted sides with gray (R201, G204, B208).



• Paint the opposite side of the light source with a darker purple color (R167, G169, B184).



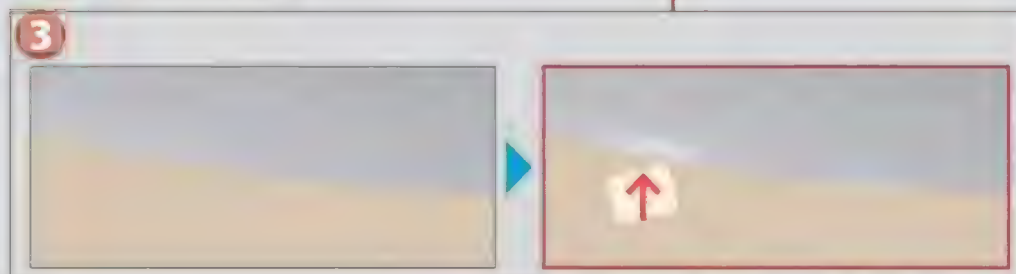
• Large highlights like this depict reflections of large light sources such as windows. It is a good idea to draw with the direction of the light source in mind.



② Highlight the corners. Rather than going all the way around the corners, taper the edges (see 0 (p.106) in "Lowboard").



③ Although it is not very noticeable, I draw a smaller highlight than .





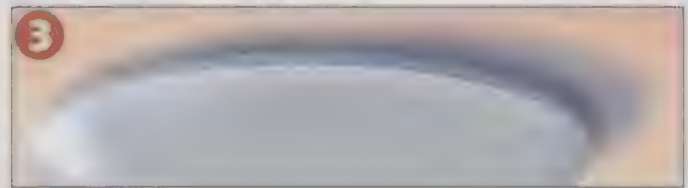
• This is the state before drawing the shadow.



- 2 Create a new layer and set the [Opacity] to 70%. Draw the shadows with the large brush of the poke feet. Use slightly blue or purplish colors (R170, G170, B185) instead of completely neutral colors such as black or gray.



- (3) If the color of the side of the light and the color of the shadow are similar, they will be assimilated and the picture will be difficult to understand. Then, create a new layer and set the blending mode to [Multiply] to darken the shadows close to the light.



The lights in the daytime with DS turned off are complete, but you can turn the lights on by making the following changes.



light off

- The ceiling during the daytime is brightened by light from outside, but the ceiling at night is darkened.
- 2 During the day, the highlight is added by reflecting the light source such as the window, but at night, the ceiling light itself is the light source, so the highlight is hidden.
- 3 Daytime shadows extend to the opposite side of the light source, but when lit, shadows are cast near the light mounting points.



Night: lights on

- Similar to "Downlight" (p.114), apply the "Blur (us)" filter to the layer that fills the shape of the light white, and set the blending mode to [Screen]. When the S light is on, the color of the side will also be bright.
- 6 Outside the shadow will be brighter as the light hits the ceiling. Duplicate the light layer created in the first step and place it below the lamp cover layer. Next, enlarge the duplicated light layer and move it slightly upward to make the ceiling look brighter.

# mirror



The key to drawing a mirror is the mirror image reflected in the mirror. Here, we will use a tabletop mirror (width 16 cm, depth 7 cm, height 21 cm) as an example, but we will focus on the mirror image, not the frame. See "Lowboard" (p.104) for wood lacquer on the frame.

## statuepoint

01

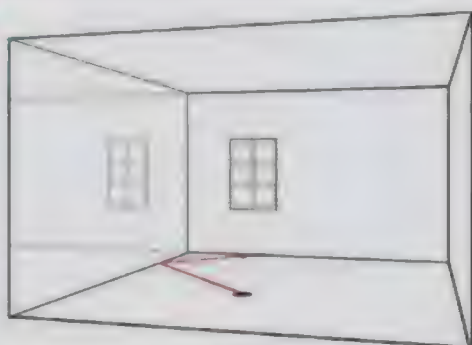
draw what you see in the mirror

**A** Using a room with a mirror on one side as an example, we will explain what is reflected in the mirror. Thinking about what you see in a mirror can be difficult, but a top view helps you understand what is reflected. Assuming that the entire wall is a mirror surface, imagine that there is "the same room with only the arrangement of things reversed" on the other side of the wall, such as .

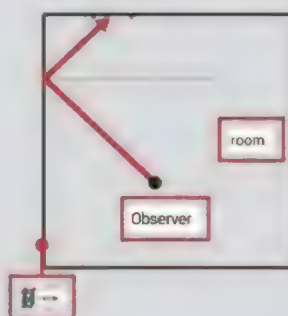
It will be easier to understand.

**A** In the above, the walls are mirror-finished, but if the floor is mirror-finished, the same way of thinking can be applied. In particular, floors often use glossy materials, so specular reflection is often used

A

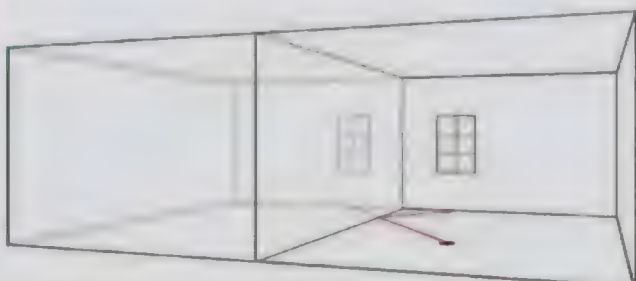


A room with a mirrored wall on the left

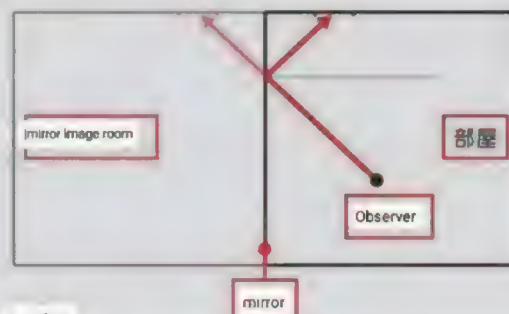


top view

B



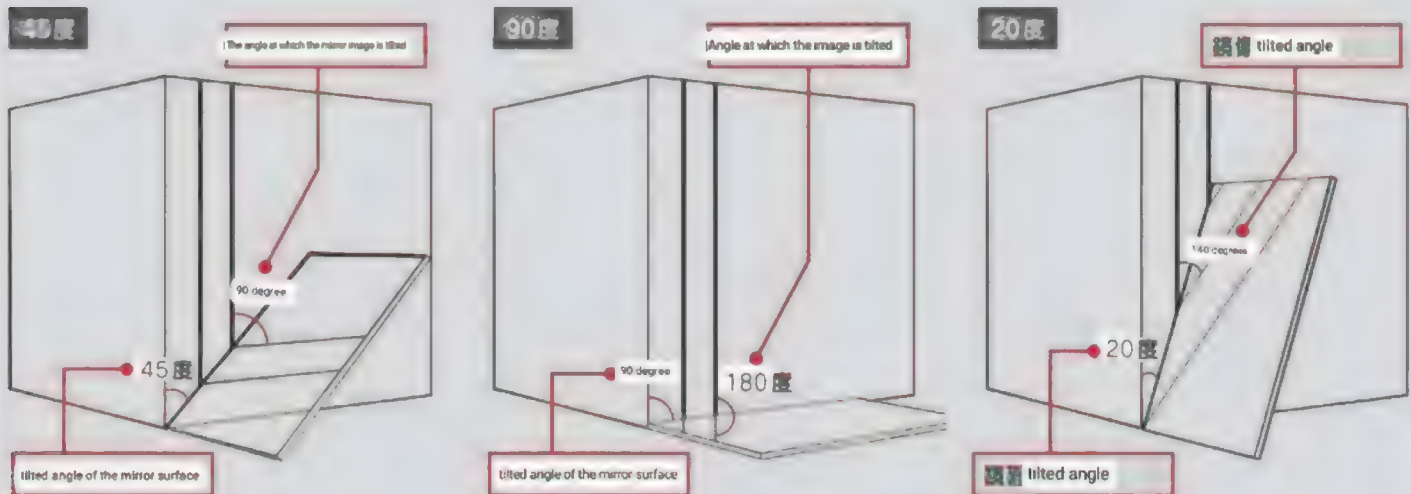
Suppose you have a mirrored room with left and right flipped



top view



Full-length mirrors and desk mirrors are often slanted and angled. We will see how the tilted mirror surface is reflected depending on the angle.



Objects reflected in a tilted mirror are tilted at an angle that is double the angle at which the mirror is tilted. For example, if you tilt a mirror 45 degrees, you get a mirror image tilted 90 degrees. The tilted 45 degrees and the reflected 45 degrees are added to double the angle to 90 degrees.

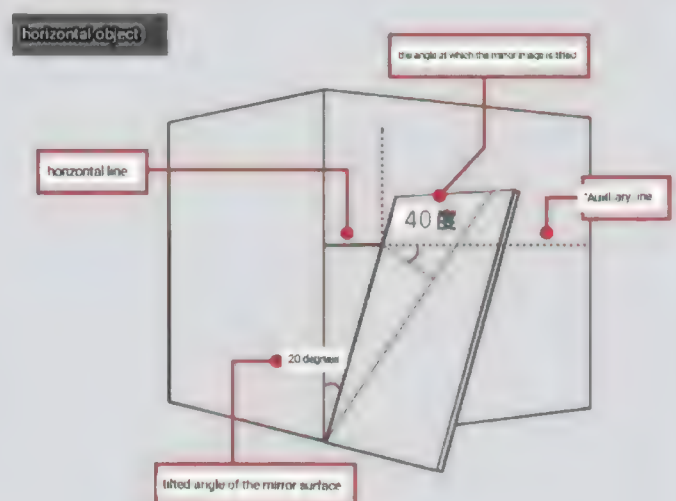
Similarly, if you tilt it 90 degrees and make it horizontal, it will be 180 degrees and you will see a mirror image that is upside down. It is often used when drawing floors and tables. I guess.

If it is tilted by about 20 degrees, the tilted angle of the mirror image is about 40 degrees, so it will be in a square shape as shown in the figure.

In 102, I explained with a picture with a vertical object right next to it, but there is no problem with the same idea for horizontal objects.

Draw an auxiliary line that extends the line of the object where it is hidden by the mirror, and tilt it from that line to an angle that is twice the angle at which the mirror is tilted.

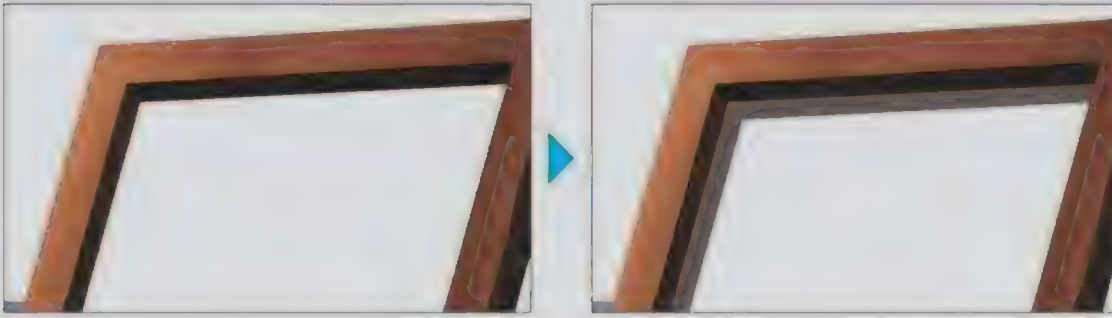
Although the angle values have been described in detail for explanation, there is no need to worry about the difference of a few degrees when actually drawing. In general, it will be useful enough to tilt the mirror image twice as much as the angle at which the mirror is tilted.



04

draw a mirror image of the frame

Draw a mirror image of the frame part.



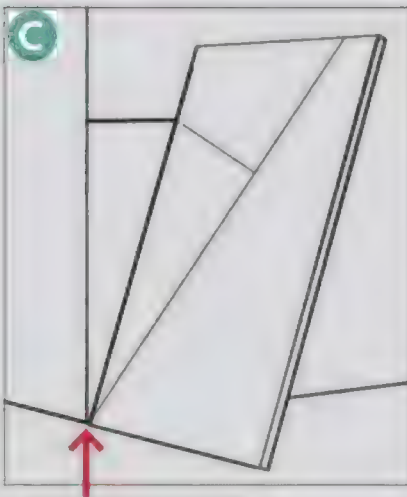
05

Mirror image when the mirror surface and the object are far apart

C, the mirror image of is the red dotted line

located in the The cause of this deviation is the distance between the object and the mirror surface.

Although the position of



There is no distance between the object and the mirror



There is a distance to the object

06

If the object is far away, extend the mirror surface and draw

If there is a distance between the object and the mirror, consider extending the surface of the mirror to the position where it hits the object. When there is no distance from the object when the mirror surface is extended like the blue surface of the sun

can be considered in the same way. Draw a mirror image on the extended blue surface like , and cut out only the actual mirror surface. This allows us to draw the above-mentioned gap.





# office chair



The office chair is a frequently used background object that is used not only in the office but also in the room at home. The example shows an office chair (total height 80-95cm, seat height 40-55cm) with "upholstered", "low-pack" and "without armrests". There are also leather upholstery and mesh ones, high backs with high backs, and armrests.

The width and depth of the seat are about 40 cm, and the total height is about twice the height of the seat. The width of the legs is about 55cm to 60cm, which is slightly larger than the seat. For how to draw the gas cylinder, see "Low table" (p.108).

## Drawing point

01

### draw five legs

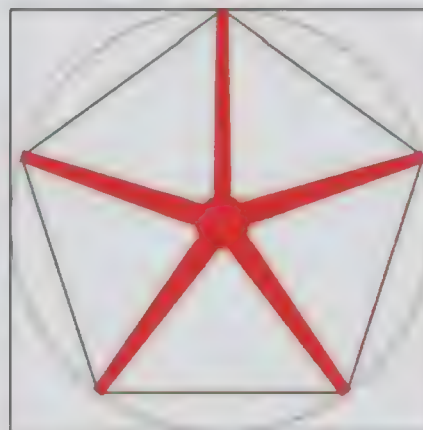
The difficulty with office chairs is that they have five legs. If there are less than 4 legs, it is still easy to grasp, but if you draw legs that go in 5 directions with perspective attached, the difficulty increases.

To solve this problem, use a square guide similar to the circle guide (p.112).

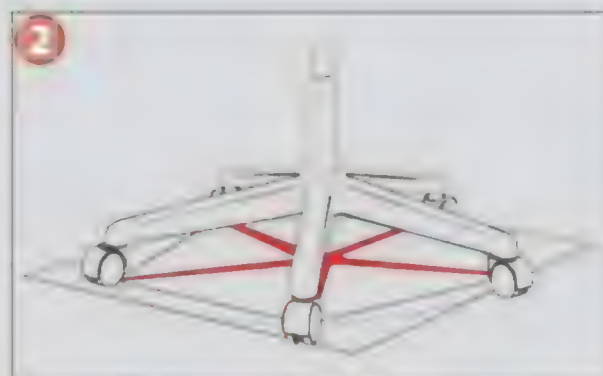
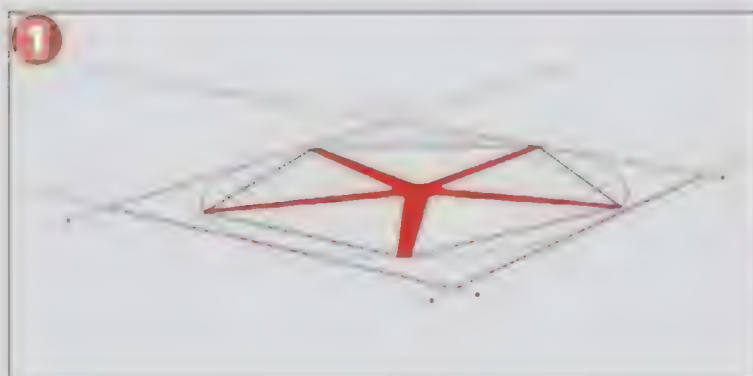
For five-legged guides, use a five-legged guide that uses a regular pentagon instead of a circle. The 5-legged guide here also draws the circle of the circular guide and the red line of the leg, but it is not essential. The key is to create a regular pentagon within the square.

After creating a guide material that creates a regular pentagon inside the square, transform it according to the perspective as shown below. Then draw so that the casters are placed at the corners of the regular pentagon as shown in 2.

By using guides in this way, you can accurately draw the verses of objects that are difficult to balance, such as five-legged objects.



5 leg guide



Create a pentagon polygon by selecting the Polygon Tool from the Toolbox and setting the number of sides to 5 in the Tool Options Bar.

You can create

In versions up to Photoshop CS5, the [Polygon Tool] is not available in the [Toolbox].

Options bar, select the Polygon Tool.

Next, use the Brush to draw bus borders (p. 182) in the Brushes window to draw a line around the pentagonal bus shape you just

created

A



B

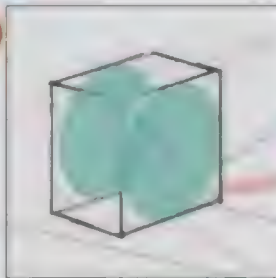


## 02

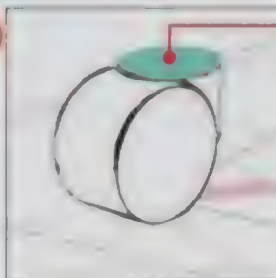
## Draw casters using circle guides

- Since the caster wheels are shaped like a horizontal cylinder, you can use the circular guide explained in "Downlights". When drawing a cylinder with circular guides, take a cuboid shape and draw using two circular guides on two sides.
- (2) Use circular guides for the joints between the casters and the chair (where there are bolts for attaching to the legs of the chair). By the way, since the position of the wheel is not fixed, it may rotate and enter inside. So the pentagon corners of the five-legged guide should be where the caster joins the chair rather than at the end of the caster wheel.

1



2



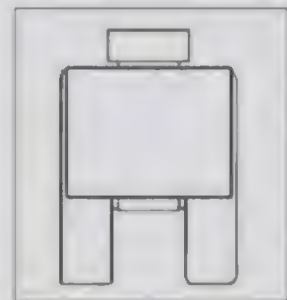
This position is directly above the corners of the pentagon of the guide

## 03

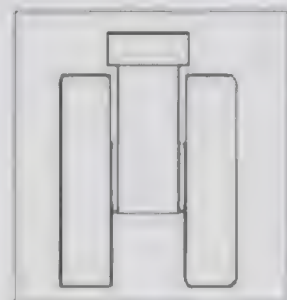
## caster wheel structure

The casters of office chairs are double-wheeled casters with two wheels. As shown in the figure, there are models with and without covers.

If you are painting a distant view, you can omit such details.



Double wheel caster with cover



Double wheel caster without cover

Small parts such as caster wheels tend to be omitted in , so it's better not to just use other people's drawings as reference materials

Not only this caster wheel, but when drawing something close to you, you can understand the structure by checking the photo materials and you will be able to draw a solid picture. It is recommended that you prepare several materials, including photographs, before starting to draw.



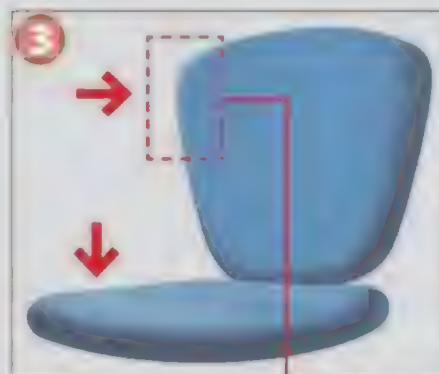
# 04

## paint the seat and backrest

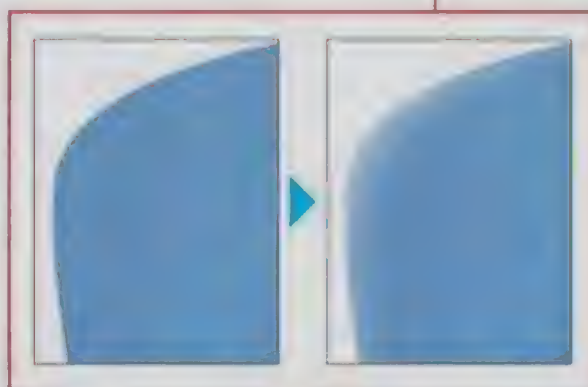
• Since the seat and backrest are made up of curved lines, you can use the path (Pen tool) to create a clean base layer.

2 Apply a clipping mask on the base layer so that it doesn't stick out, and paint the shadows with a large bokeh brush.

3 Lightly paint the back and seat on the opposite side of the shade.



Layer structure



# 05

## Precautions for painting the seat and backrest

Conversely, if you draw in a solid image, it may turn out to be superfluous. If you leave the brush painted like the NG example, it will have a slightly dirty texture.

If not, it is NG. In the painting process, it should be 'simple'.



1 Place the line drawing layer on the base layer and set the drawing mode

Put it on [Multiply].

2 Paint the sides of the casters dark.

3 Paint the corners of the wheels with light gray.

• Apply shadows on the cover. Similarly, for areas close to the ground

Paint it dark. With a

5 large brush on the poke foot to draw the curved surface of the cover

Add a gradation to the cover.

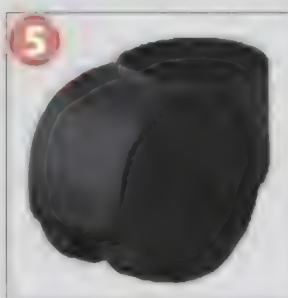
6 With a large blurred eraser tool, the center from the top and bottom

Erase the gradation that was put in like shaving.



cover shadow

dark gradation



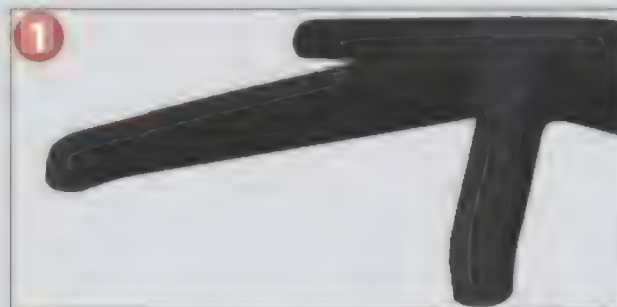
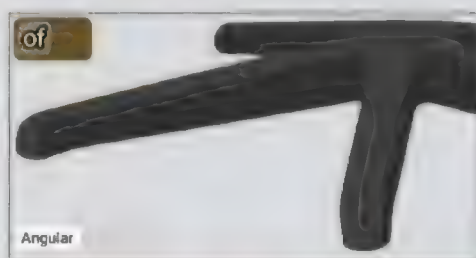
The state of the gradation of  
(The background is made white  
to make it easier to understand)

1 By painting with a large bokeh brush, you

can paint with rounded corners as shown in the figure. If you use a hard brush with a small bokeh, the corners will become right angles as shown in the NG example.

(2) The bokeh is too big with 1, so it's too blurry, so I'll make it easier to understand the difference by painting with a brush that makes the bokeh a little smaller.

3 Highlight the corners. It's not very glossy, so I'll paint it gray instead of pure white.





# PET bottles

There are types of PET bottles, such as pressure-resistant bottles and heat-resistant bottles. The pressure-resistant bottles used for carbonated drinks are cylindrical overall, with a petaloid bottom that uses hemispheres to stand on their own. By structuring the entire bottle with curves, it is easier to withstand the internal pressure caused by carbon dioxide gas. In addition, the opening inside the cap of the pressure-resistant bottle is transparent.

The heat-resistant bottles used for fruit juice drinks are thick and hard, and have a square body with uneven pressure-reducing panels. The inside mouth of the cap is white.

Here, a pressure-resistant bottle (500ml diameter 7cm height 21cm) is used as an example to explain how to apply a texture to a cylinder. There are many opportunities to use this method, as it can also be used to apply textures to canned products such as spray cans and bottled products such as jam jars.



## Drawing point

01

### Draw a cylinder with varying size circles

By attaching the circular guides explained in "Downlight" (p.112) to the top and bottom of the rectangular parallelepiped and aligning them with the berth, you can create a cylindrical shape.

However, in the case of cylinders such as PET bottles, where the top and bottom are different in circular size, it is necessary to devise a circular guide. Create circle guides with circles of both upper and lower sizes, like the yellow and light blue circles in the illustration. Duplicate it and transform it according to the upper and lower faces of the rectangular parallelepiped. With this method, the center of the circle will not be misaligned between the bottom and the top.

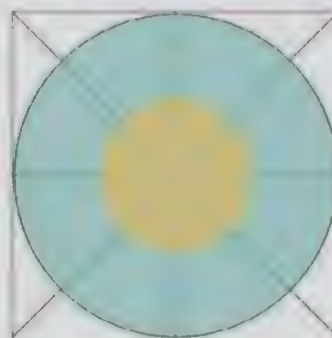
## memo

### Circle Guide to Smart Object

If you set the circle guide as a smart object (p.98), you can switch between displaying only the blue circle and displaying only the yellow circle, which is convenient for range selection.

can be rewritten.

Using this circular guide as a guide, draw the base layer.



The position where the diagonal lines intersect is the center position of the guide. Add a small circle guide



02

### paint a cap

• Draw the base layer. From now on, we will use this layer as a clipping mask.

② Use a large bokeh brush to create a light blue gradation.

input.

③ Draw a vertical line with a bright color.

Match the 0 circle guide to whiten the circle on the top surface.

1



2



3



4



## ① Paint the base layer with the color of the drink.

In the example, it is painted in yellow (R255 G251, B102). Also, for harmony processing (p. 129), I use color-traced (making the color of the line art darker in hue close to the adjacent base color) line art.

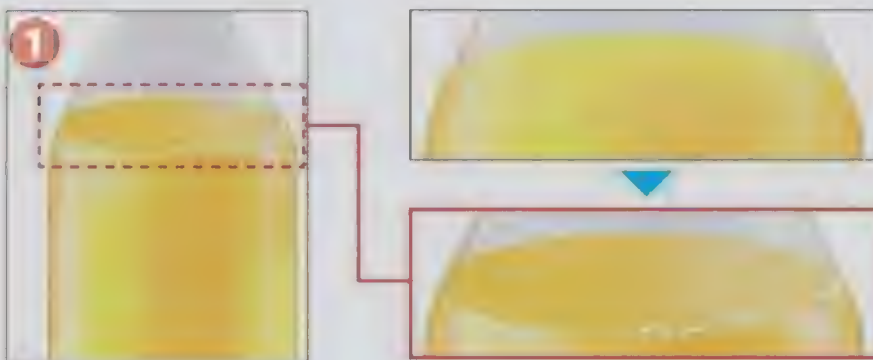
## (2) Paint brightly in the vertical direction with a large bokeh brush.

To make it more familiar, use the [Eraser tool] with a large bokeh. ] to adjust.

## ③ Paint near the center and near the bottom with a darker color.



• Create a water surface layer. Add a circle the size of the water surface to the circle guide of , and use it for hitting.



## ③ Draw the base layer of the

label. Again, use a circle guide to draw a curved line.



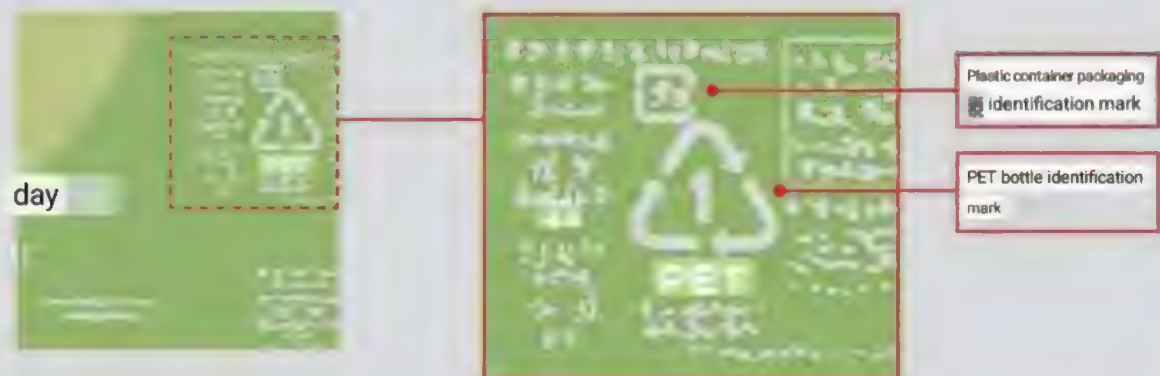
## ② Put the highlight of the plastic bottle.





Draw a PET mark and a plastic mark. Make characters smaller than the mark illegible. This is because if you write in such a way that even the fine print can be read as text, it will be too real and the picture will be overloaded with information.

Also, it's a good idea to make the label's texture a smart object so that it can be changed even after transformation.

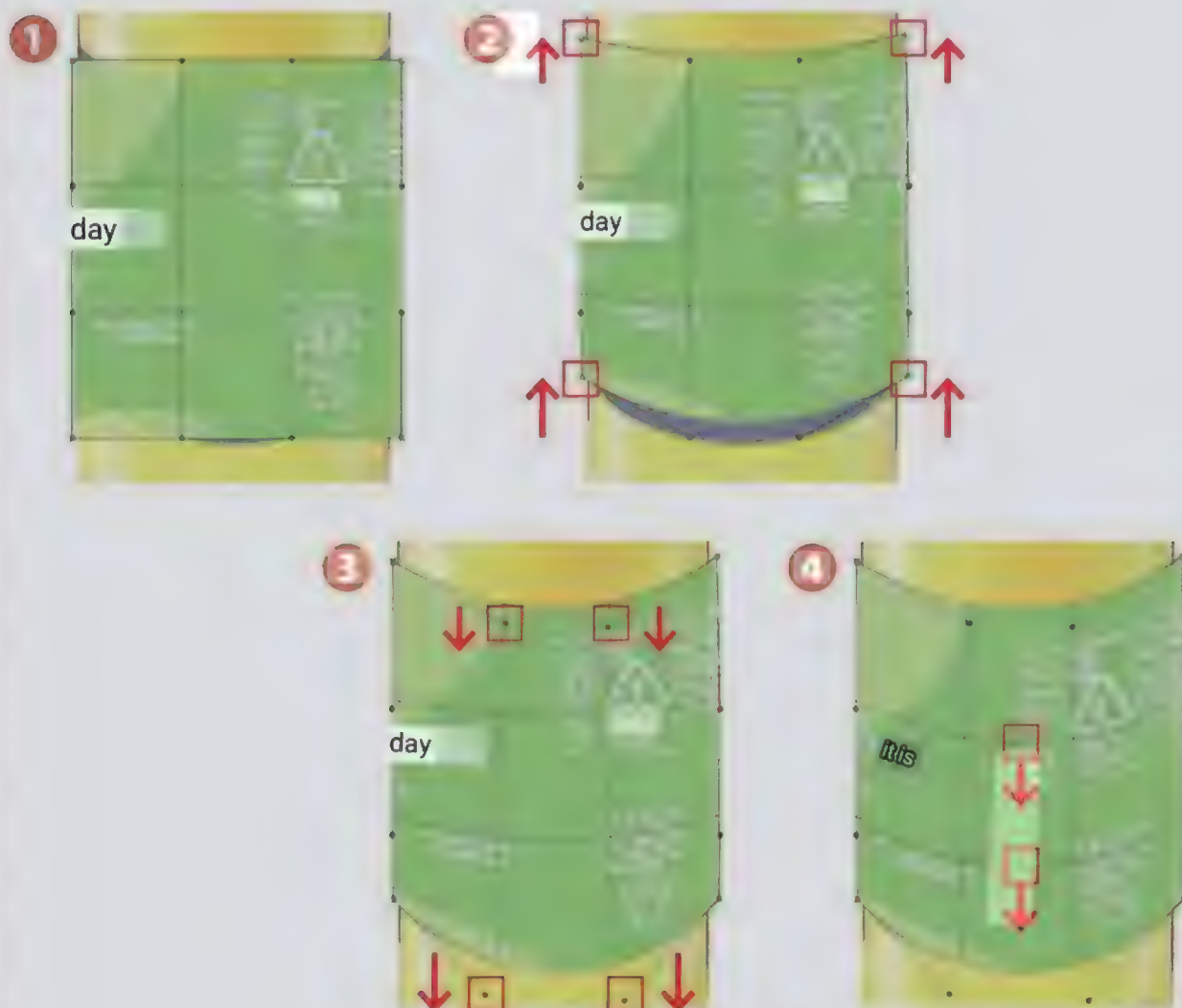


- Lower the [Opacity] of the label layer to make it transparent so that you can check the pasting range.

Next, select [Edit] → [Transform] → [Warp] from the menu and the warp mesh will be displayed as shown in

- the figure. Move the control point up.
- Lower the handle to match the curve.

- The outer shape fits the cylinder, but the curves of the inner mesh do not fit the cylinder, so move the inner mesh segment. Confirm with the [Enter] key when the curve is about the same as the curve of the outer arc. Restore the opacity [degree] of the layer that was last lowered in step 1.



(1) Only a label is pasted

State.

(2) Darkens the side opposite the light source.

It makes the hue more blue without  
reducing the lightness so much.

(3) Brush with large bokeh on the light source

side Paint white vertically to make it  
brighter



## COLUMN

### Harmony processing

People tend to think that the more realistic, the better, but a background like a photograph is only good when combined with a person like a photograph, and the balance with the character is important.

As a way to make the character and the background look familiar, There is a method of putting line drawings in the scenery. I usually don't leave the line art in the background, but adding it will harmonize with the character.

This kind of processing is called "harmony processing".

increase.

Harmony processing can also be performed using layer styles (p.196). Even in that case, it is a good idea to use the [Brush Tool] where you want the line to be strong or weak.

The PET bottles explained in this section are — objects that can easily be held by a character or placed near them, so I used harmony processing for explanation. As you can see in the example above, when drawing the background, the basic rule is not to leave any line art behind.

If there is no need to match the character, such as when a plastic bottle is far away, there is no need to perform harmony processing



No harmony processing



With harmony processing



# sofa



A sofa originally meant a three-seater, but today, two-seaters and personal sofas are also called sofas.

Here, I will draw a 3-seater sofa (width 180 cm, depth 80 cm, height 75 cm, seat height 40 cm) with a modified quilting made of leather. The width of the seat for one person is 50 to 60 cm, so the width for three people is about 180 cm. The width is about 1 tatami mat and the depth is slightly shorter than 1 tatami mat. Sofas are made of fabric (fabric or woven fabric) or leather (synthetic leather). The shape of the quilting is also a variety of shapes and squares.

## Drawing point

01

### Draw a cuboid shape

Create a cuboid shape. A guide material is attached to the bottom of the table in the same way as the "low table" (p.108) to make it easier to grasp the position of the legs.

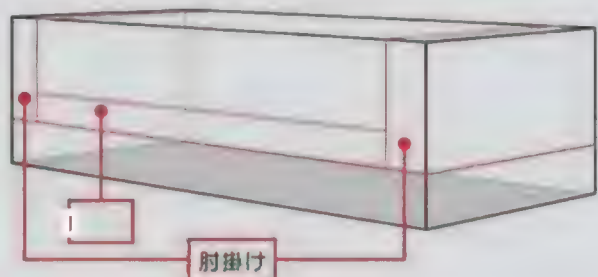


02

### Draw the architrave and armrests

Add lines to the cuboid to draw the sofa's arch and

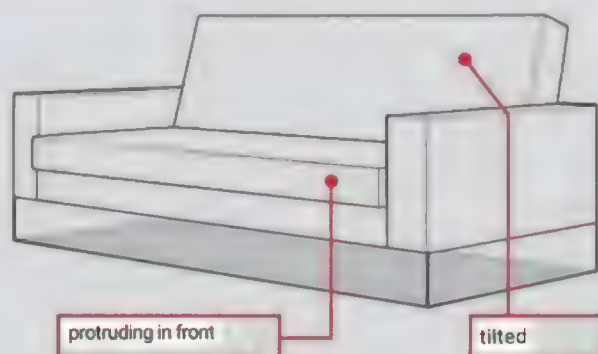
armrests.



03

### Draw the seat and backrest

It varies depending on the product, but in the example, the backrest is tilted. In addition, although the seat part also depends on the product, in the example, it is drawn so that it protrudes in front of the architrave and armrests.



Draw the legs of the sofa. The legs in the back circled in red are the most difficult to draw, and depending on the angle, they may be completely hidden and invisible. The leg in the back is a place that is difficult to grasp the position if you try to draw it by intuition, but the guide material is reworked.



I prepared it in advance so you can draw without hesitation. Finally, the guide material can be reused by applying the "Blur (Gaussian)" filter, like the completed image of the example.



If it is a flat surface, you can find the equal spacing just by measuring the length, but to find the equal spacing in a picture with a perspective, use auxiliary lines as shown in the figure.

It is possible to further increase the number of divisions, but if the number of divisions exceeds 5, the auxiliary lines become complicated.

So, instead of this division method, I use the method (p.167) of transforming a plane material with equally spaced lines. If you want to divide the model into 3 or 4 parts like this example, it is easier than creating a plane and transforming it.



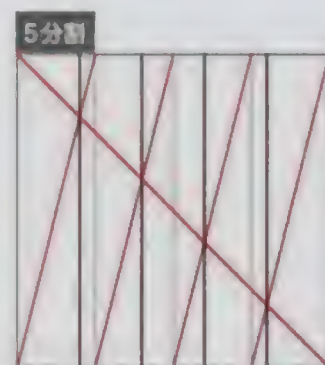
Draw an auxiliary line on the diagonal and draw a vertical line at the point where it intersects to divide it into two



Draw an auxiliary line for each of the rectangles divided into two, and draw a vertical line at the point where it intersects with the diagonal used for division into three.



4 divisions by repeating 2 divisions twice

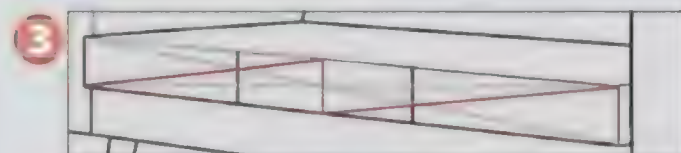


Draw an auxiliary line diagonally on each rectangle divided into 4 parts, and draw a straight line at the point where it intersects with the diagonal line used for dividing the rectangle into 5 parts.

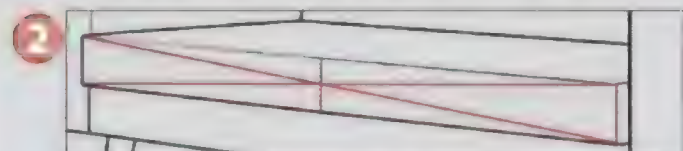
1 From this state, divide the seat surface into three equal parts using the equally spaced auxiliary lines explained in 05.



3 Draw a diagonal line on the bisected line, and draw a vertical line at the intersection of it and the first diagonal line.



(2) Draw a vertical line (auxiliary line) at the intersection of the diagonal lines

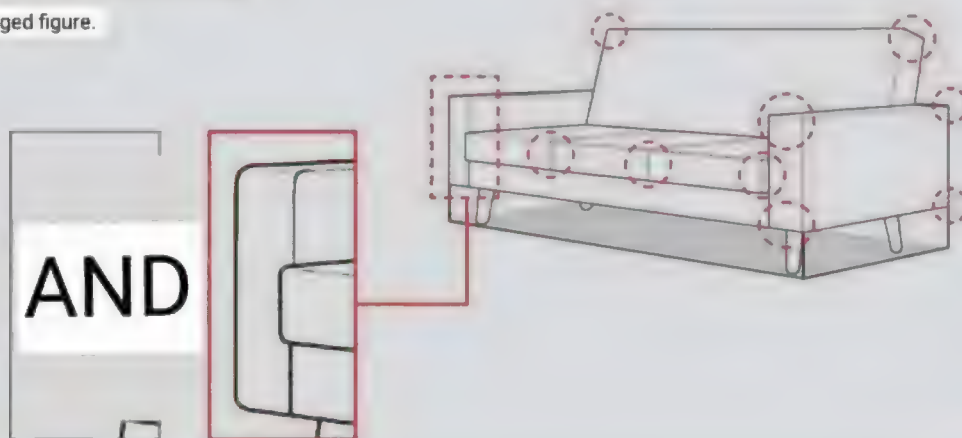


4 Erase the auxiliary lines and draw a line for the depth of the seat.





Correct the corners that were drawn at right angles to curves. Cut the corners circled in red in the same way as in the enlarged figure.



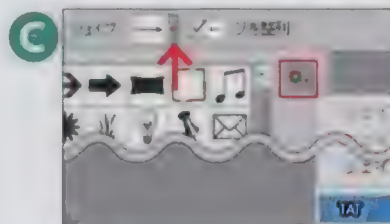
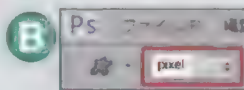
## paint point

## Draw the quilting base layer

Select [Custom Shape Tool], click the arrow part of [Shape Popup Panel] in the [Tool], select Pixels.

Option Bar], and click next to the shape list.

Click the gear icon and select "All" to add "Diamond Card" to the list of shapes. Use this shape to create a base layer for one quilting shape - (R45, G45, B45).



## apply the quilting

- ① Base layer made with 1108.
- ② Duplicate the layer, change it to a slightly brighter color (R83, G86, B80) and scale it down.
- ③ From the menu, select [Filter] > [Blur] > [Blur (Gaussian)] to blur.
- Draw highlights. By drawing highlights in multiple directions around the button, it expresses the pulled leather.
- ⑤ It may be difficult to see the change, but I used a large bokeh brush to create a gradation on the right side. The wider the gradation width, the softer it looks, and the narrower the gradation width, the thinner and harder it looks.
- ⑥ Add a layer and draw a quilting button. The color is different, but the drawing method is the same as the handle of the "low board" (p.106).



① Make the quilting finished in step 109 into smart objects (p.98) and arrange them. Create a rectangular layer in the shape of the back of the sofa and use a clipping mask to prevent the quilting from appearing outside the bounds. (2) Deformed and pasted.

③ Create a layer with a lighter color gradient on top — E — and a layer with a darker color gradient on the bottom. Then apply [Level Correction] on the adjustment layer. The background color has been changed to make it easier to see where it was painted, but it is actually painted on a transparent layer.

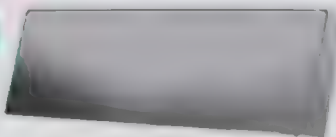


AND

F



Set blending mode to [Hard Light], [Opacity] to "100%"



[Blending Mode] [Normal]  
[Opacity] [50%]

① The front and top are bright colors (R100, G105, B95) so that you can see the difference between the faces.

② Blur the corners and round the corners. You can paint with a large bokeh brush or use a filter such as Gaussian Blur. Bokeh foot and

③ brush size are both positive with a large brush. Add a gradation to the faces and sides.

④ Paint the corners of the top surface with a bright color using a large bokeh brush. This makes it easier to see the difference between the front and top surfaces.



① Leg base layer (R225 G165, B85). The top part has a sloppy shape, but it's not a problem because it's hidden.

② Apply shades (R160, G85, B50) using a large bokeh brush.

③ Paint highlights and reflections. For close-up shots, I think it would be fine to add a wooden texture, but if the distance is the same as in the example, there is no problem with a simple design like this.





# cushion



Cushions are placed on sofas as backrests.

The color and pattern of the cushion cover will be the accent of the interior.

The example is a simple cushion, but if it is a cushion for a luxury room, it would be nice to add a fringe (tassels) to the seams of the cover.

The method of transforming the pattern into the shape of cloth explained in this section is not limited to cushions, be used for futons, banners, banners, etc.

## paint point

### 01

#### draw base layer

The more you accentuate your curves, the more puffed up your cushion will be. If you want to make it look like a flat cushion, use a straighter line than this example. draw in a realistic

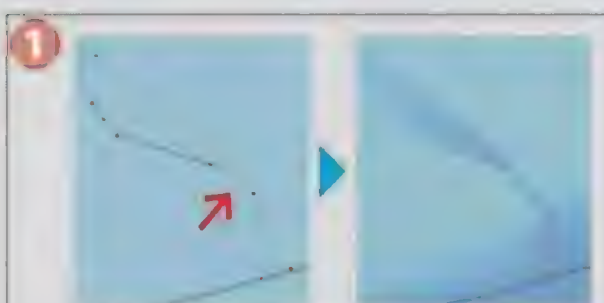
way. The line drawn near the center is the seam of the cushion cover.



### 02

#### 1 Draw shadows (wrinkle shadows)

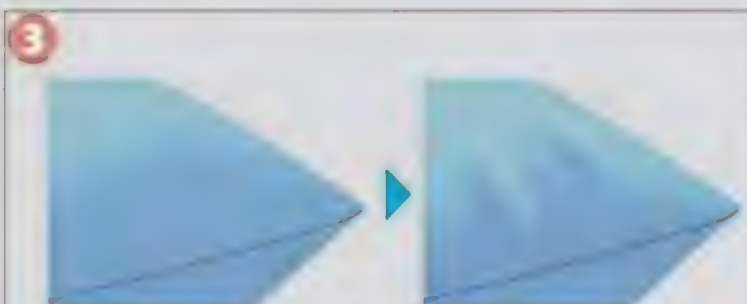
Draw shadows by choosing a color (R145, G195, B246) darker than the base layer.



Since the shadows of wrinkles have many curved lines, I use a lasso to select the area and fill it in. Continuing curved lines, as shown in the figure, express wrinkles that make the fabric look like they are leaning together. Furthermore, if you cut it off along the arrows in the figure, you can create triangular wrinkles.



Occasionally, the hardness can be reduced by partially erasing with a large bokeh brush with reduced opacity.



Draw wrinkles by erasing the shadow color gradation

03

2 Draw shades (dark shades of wrinkles)

Create a new layer and set the layer's [Opacity] to "60%". Draw 2 shades by choosing a color (R75, G117, B202) darker than 1 shade.



04

paint brightly

Use a large bokeh brush to paint in a lighter gradation from the top.



point of the pattern

05

Paste the pattern on the curved surface

Even if you try to transform the texture of the pattern into the shape of the cushion using the [Free Transform] function, it will not fit the curved surface of the cushion.

Add texture to bulging objects like cushions

When aligning, use [Warp] in the same way as with the "plastic bottle" label (p.128). Select

Edit > Transform > Warp from the menu and see the Warp control button displayed like a sun.

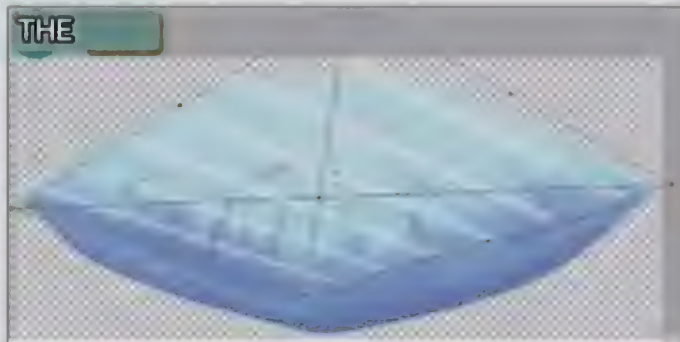
Move points or mesh segments in the direction of the arrow. vinegar.

For the sake of explanation, is deformed by warping from the state where "Free Transform" is confirmed, but normally, without free transform, warp the control point from the beginning to this position.

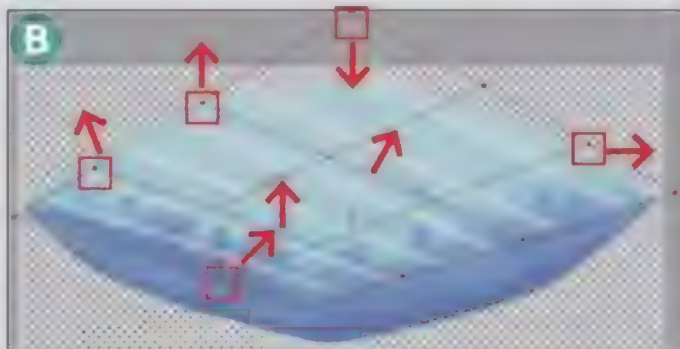


pattern texture

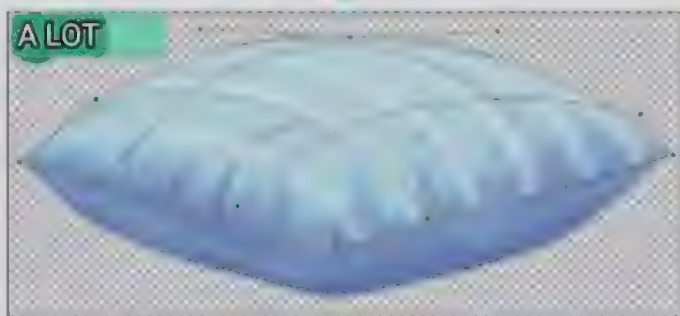
THE



B



A LOT





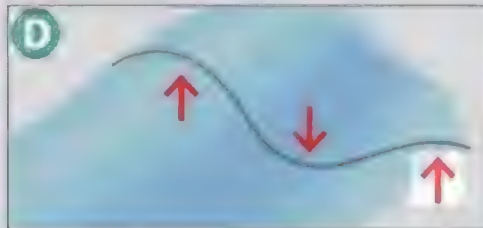
In many cases, even 05 is enough to transform the pattern, but I will also explain how to adapt it to the unevenness of the cloth.

**D** so that the shaded area becomes a downward arc like

Transform the pattern into

In the case of a gentle curved surface, an arc like ① is fine, but if the cloth is folded like the red circle part of , The angle becomes steep and becomes sharp like the sun. If you

transform the entire pattern according to the shadow of the wrinkles **G** It looks like.



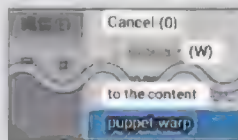
For a simple pattern like this example, use [Eraser]. It may be quicker to draw and redo it by hand using the Mutool and the Brush tool, but it is easier to use Puppet Warp when pasting textures with more complex patterns.

Select the pattern layer and select [Edit] → [Background] from the menu. Pet Warp] and check [Show Mesh] to display the mesh as shown below. You can move the position of the pin placed at the clicked point.

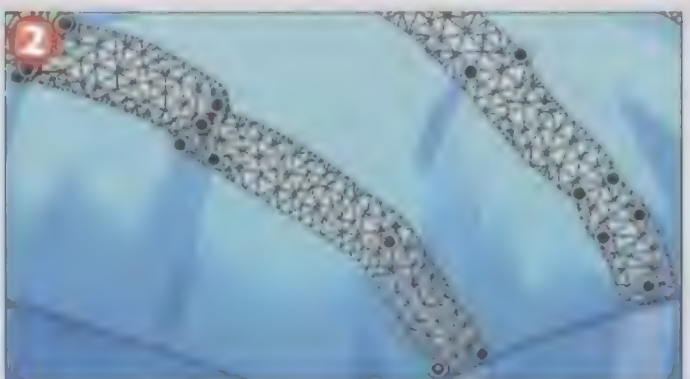
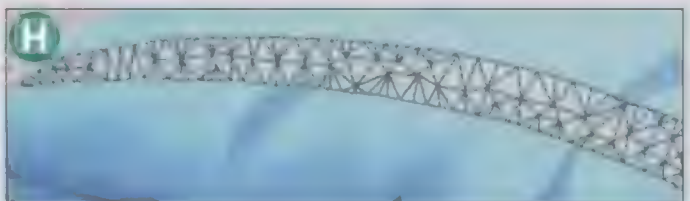
You can transform with

As the name "puppet" suggests, it was originally a function that allows you to change the pose freely by placing pins on the joints and hands and feet of the person in the photo. By using this, it is possible to deal with fine deformation of the pattern.

First, place pins on both ends of the handle that you do not want to move. Once the edge is fixed, place a pin appropriately on the wrinkled part on the inside as shown in ②, and drag the pin to move it to transform it.



[Edit] → [Puppet Warp]



Unlike Puppet Warp, it is not a method of directly manipulating and transforming the shape, but there is also a method of matching it to the shape of the cloth by using the [Displace] filter. Puppet

Twarping is a feature from Photoshop CS5, but this method also works in older versions of Photoshop.

### create a replacement map

The [Replace] filter transforms the specified image according to the brightness and darkness. A filter transforms the white (high brightness) area to the upper left and the black (low brightness) area to the lower right.

First, replace map data, where and how much to transform. It is necessary to prepare a psd file to specify whether.

- 1 Select an image of a cushion that has no pattern and is just shaded. from the menu, select [Image] → [Duplicate] and select [Layer Merge and Duplicate] and press [OK] to duplicate

image

- 2 Make the duplicated image black and white with the [B&W] adjustment layer.
- 3 Increase the contrast with [Level Correction] on the adjustment layer.

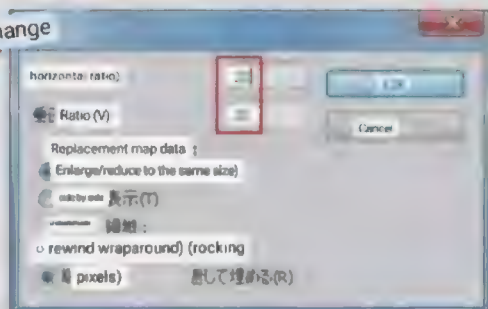
(1) The file name can be anything, but the replacement map image

Give it a name so that you can recognize it as an image and save it.

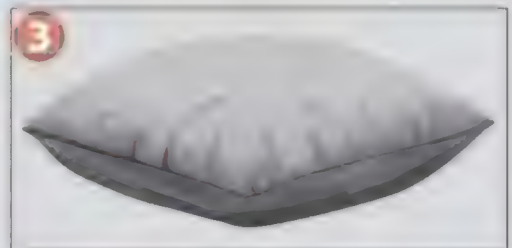
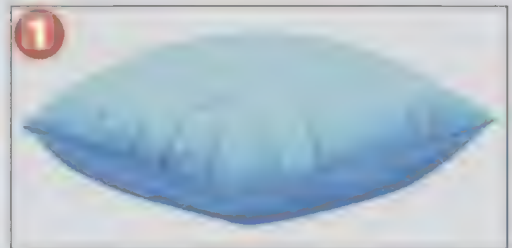
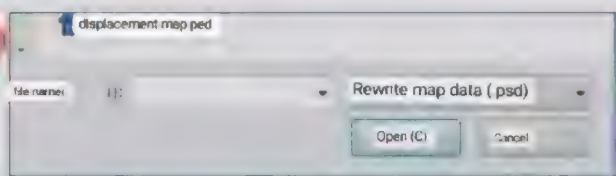
### Filter by Replace

- 5 Select the pattern layer of the original image that you want to transform, and execute [Filter] → [Transform] → [Replace] from the menu. If you increase the values for [Horizontal ratio] and [Vertical ratio] in the [Replace] window, the degree of deformation will increase, but the appropriate values will differ depending on the image, so you will have to try again and again to determine the values.
- 6 Finally, specify the replacement map data created in
- 7 step. deformation is performed. If the deformation is too weak or too strong, try again from the [Replace] filter settings in or the [Level correction] settings.

5 change

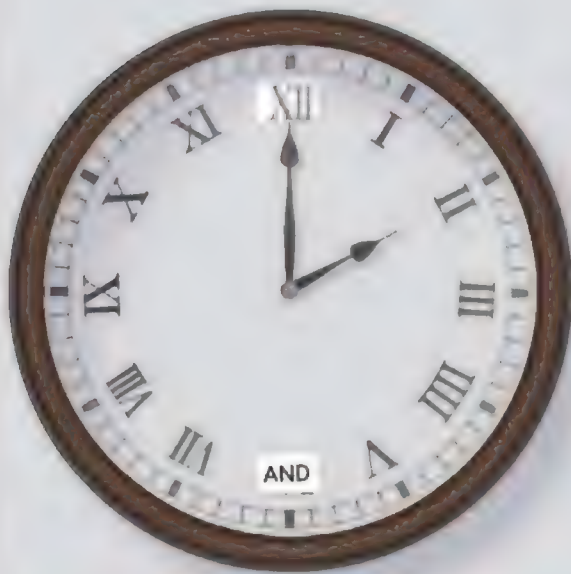


6





# clock



There are various types of clocks, such as wristwatches, table clocks, and wall clocks, but since we will mainly focus on the dial part here, we will draw a wall clock with a simple frame for the exterior part. The method of making a linear scale into a circle and inserting characters along a circle, which will be explained here, can be used not only for watches, but also for signboards and package logos.

If it's an illustration, it's fine to draw the hands of a clock to set the time, but in the case of game backgrounds, the same background is used multiple times as the time in the game passes, so the fixed time is not known. It's not convenient to put it away. It is necessary to devise measures such as not drawing the hands of the clock so that the time cannot be seen, or hiding the hands with the reflection of the glass surface.

## Drawing point

### 01 draw dial scales

- Duplicate the lines to 60, and use the [Distribution] function (p.177) to arrange the lines at equal intervals (the figure is an enlarged view, so some parts are cut off).

② Draw slightly thicker lines on the top and bottom.

- ③ Draw 12 thick lines, thickening the lines so that after 4 thin lines there is 1 thick line.



### 02 Using the Polar Coordinates filter

Transform the scale created in step 101 into a circle to make it a clock scale. To transform, use [Filter] → [Transform] → [Polar coordinates] from the menu.

However, even if you just apply the [Polar Coordinates] filter to a randomly created image, it will be distorted like the NG example.



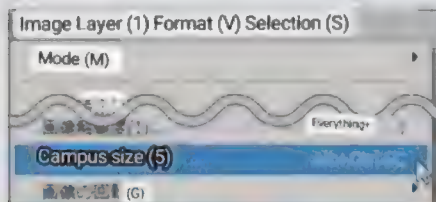
Select Cartesian Coordinates and OK



By applying the Polar Coordinates filter to an image based on the following two points, it can be transformed into a perfect circle. This method can be applied not only to clocks, but also to memory such as scales and scales, and magic squares.

#### Point 1: Make the canvas size square To make

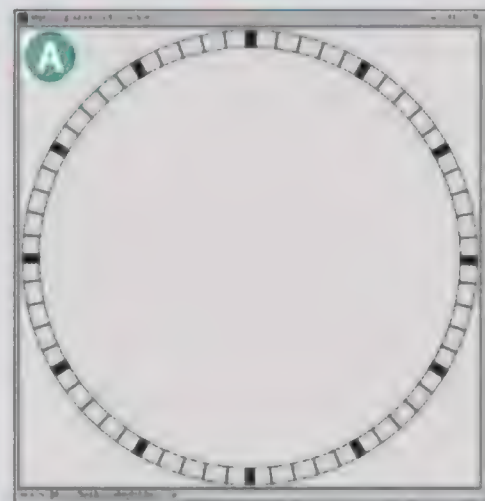
the canvas size square, select [Image] → [Canvas size] from the menu and set the same value for width and height.



#### Point 2: Place it at the bottom edge of the screen

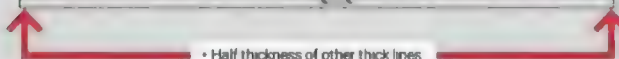
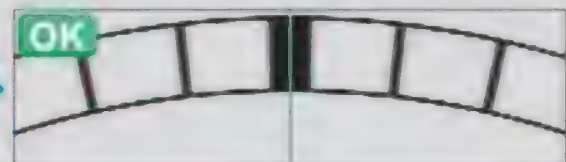
Place the object you want to transform at the bottom edge of the screen.

However, it does not fit exactly at the bottom edge, but creates a small gap.



When bending into a circle with [Polar coordinates], both ends of the original material join at the top of the circle. If only one end is made thick like this, the position will be shifted from the center.

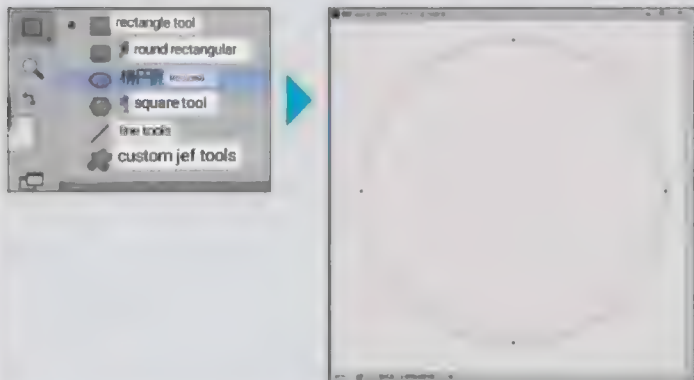
Therefore, divide the thickness of the thick line in half at the left end and the right end, and align them.



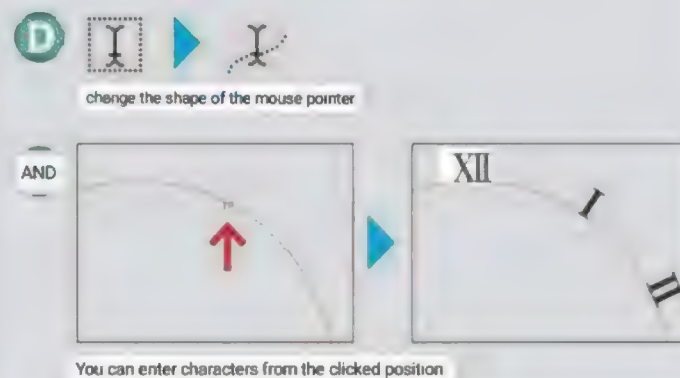


The [Text Tool] character can be aligned along the path, so I will use this function.

- 1 First, select the Ellipse Tool from the Toolbox and create a perfect circular path. Press [Shift] to make it a perfect circle, and press [Alt] ([option]) at the same time to fix the center.



- (2) Select the [Text tool] from the [Toolbox]. After selecting the bus, the mouse pointer changes as if you move the pointer over the path with the [Text tool]. If you click in that state, a vertical line cursor will appear on the line of the path, and you can write characters along the path from there. Character spacing can be adjusted with full-width and half-width spaces.



There are many types of clock hands, but here we will introduce the representative ones.

- Dauphine: A needle shaped like an elongated lozenge



- Spade Spade-shaped needle.



- Leaf: A needle shaped like a monocot leaf.



- Breguet A perforated design devised by the watchmaker Breguet. ornate needle.



#### memo draw a symmetrical needle

I will show you how to accurately draw a symmetrical needle. First create half the image. By duplicating the half image, reversing it, and integrating it, you can accurately draw a symmetrical shape.

In Photoshop, duplication and inversion are used in this way, but some software, such as CLIP STUDIO PAINT's [Symmetry ruler] function, has functions for drawing symmetrically without duplication or inversion



Indexes include Arabic numerals, Roman numerals, bar indexes, and dot indexes.

In Arabic numerals, the numbers are arranged vertically, but in the □ theme numerals, the angles of the numbers change radially.



arabic numerals



roman numerals

4 is usually written as V in Roman numerals, but is often written as III in clocks. There are various theories as to why this is the case, but there seems to be no established theory

VI

III

## paint point

08

## draw a clock frame

Create a base layer for the frame by filling in a circle that is one size larger than the dial. Select a circular portion of the dial and cut through the base layer of the frame to create a thin ring frame.

Next, select the thin ring-shaped frame, then reduce the selection with [Selection] → [Change selection] → [Shrink] in the menu, and fill it with a slightly lighter color than the base layer.

F



09

## draw a shadow

① Draw the drop shadow of the frame. Select the inside of the frame and paint with a large bokeh brush.

② Draw the shadow of the needle. After selecting the range of the needle and filling it, shift it a little.

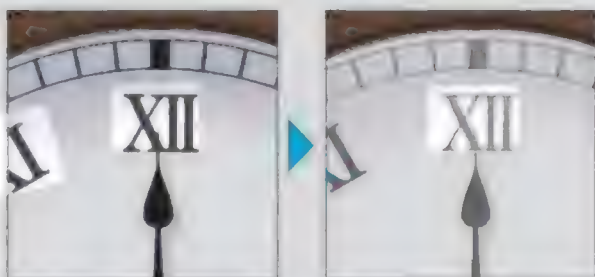


10

## draw windshield

windshield is a glass or acrylic cover. After selecting the area of the windshield, paint with a large bokeh brush. The [Opacity] of the layer is set to "60%" to lighten it.

Although it is not drawn in this example, if a bright light source such as a window is within the range of the windshield, draw the reflection of the light source with a more opaque white color, similar to the glass of the "low table" (p.111). increase.



A picture that makes it easier to see the painted area



# A string along the Skillup path

## 01 Align the letters with the bus

In "Clock" 05 (p. 140), I explained how to make a string follow a circular path, but you can make a string follow a bus of any shape like .

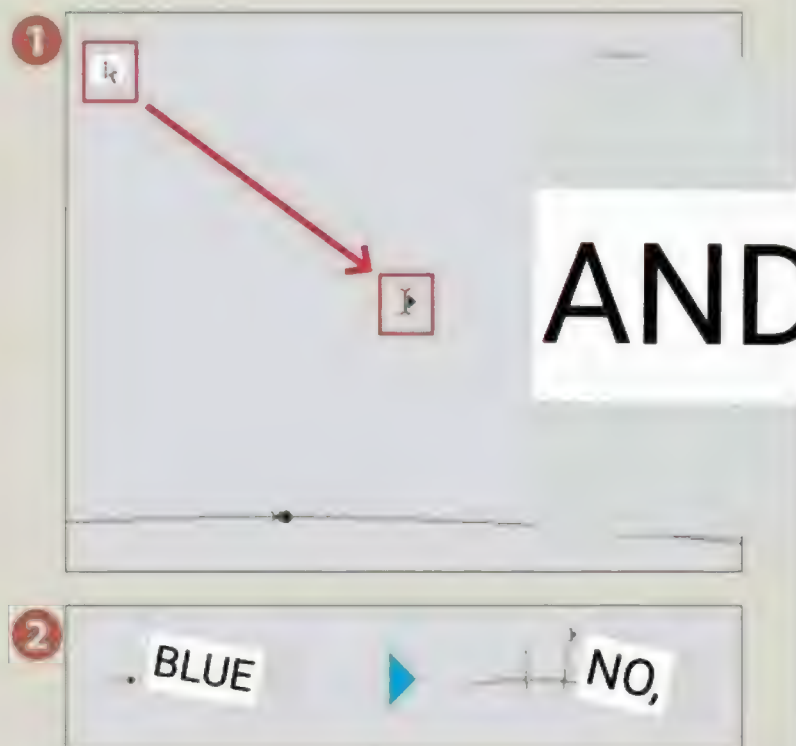
In addition to clock dials, bus character string placement can also be used for circular stamps, logo marks, and other products and signboards. Here's some more information on how to manipulate strings along paths.



## 02 Move string along path

To move a string along a bus, use to (10) When the mouse pointer is moved near the character string along the bus with the [Path selection tool], the pointer changes to .

(2) If you select a character string along the path, a mark with an X overlapped will be displayed at the beginning of the character string. If you click on the screen while the mouse pointer is , it will change to a mark with a bar. You can move the character string as much as you drag it.



## 03 Change the direction of a string along a path

The pointer is a right-pointing arrow when it is above the bus, but when it is below the bus (inside the circle) it changes to a left-pointing arrow, causing the string that was previously rotating clockwise along the outside of the circle. will rotate counterclockwise along the inside of the circle.

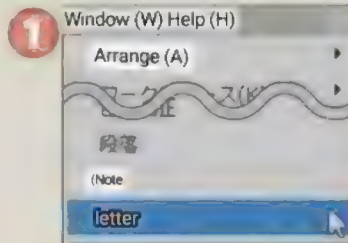


#### 04 Change the distance between the path and the string

If you want to change the distance between bus and string, use

Do it like this.

- [Window] [Text] to open the [Text] window  
open the



(2) Increasing the value of [Baseline shift]

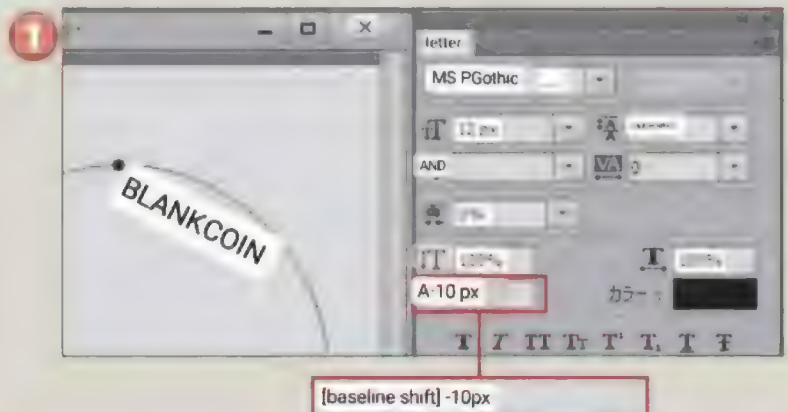
moves it upwards (outwards for circles), and  
decreasing it downwards (inwards for  
circles).



#### 05 Points to note when placing strings inside the bus circle

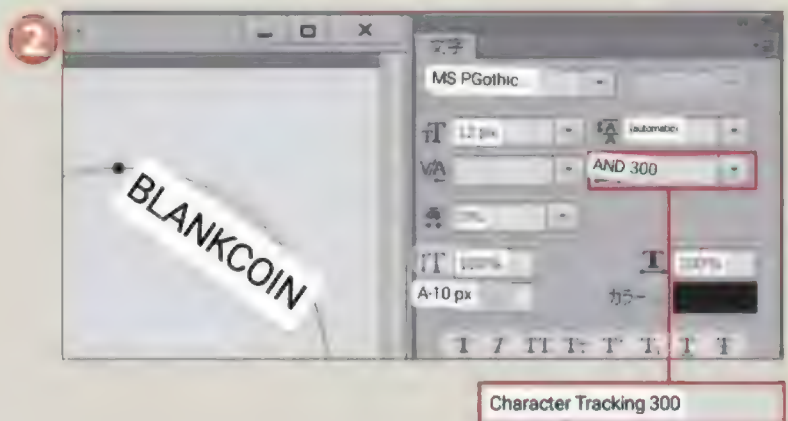
If you want to put a character inside the 0 circle,

use a negative number like this.



(2) If you enter the circle, the space between letters

becomes tight, so increase the value of "Character Tracking"  
to widen the space between letters.





# picture frames and paintings



Some picture frames are like simple poster frames, but in that case you just draw a square frame, so here we will explain more complicated and gorgeous picture frames.

In the example, for the sake of explanation, although the final form is a gold frame, it is first painted in the color of wood. Of course, if you decide to use a gold frame from the beginning, you can of course paint it gold from the beginning.

greenpoint

## 01

### paint a picture frame

1 Paint the raised areas with a color (R87, G33, B7) darker than the base layer color (R95, G50, B25).

(2) Apply bright colors (R125, G70, B40) with a brush that is thinner than the width of the darker paint (larger for blur). ③

Lower the [Opacity] of the brush to about "50%" and make it dark

Apply a thin layer of color (R.95, G35, B10) to smooth out the bumps.

4 Select a wide plane area and add a gradation.

5 Highlight the convex areas with bright colors (R175, G110, B75).

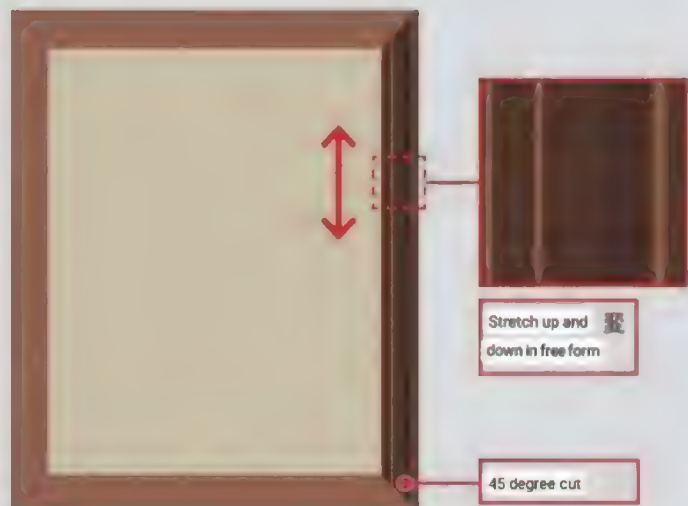


## 02

### Stretch to the size of the picture frame

Instead of trying to paint the entire length of the frame from the beginning, it's a good idea to transform the short, partial drawing as shown in the explanatory diagram and stretch it to the desired length.

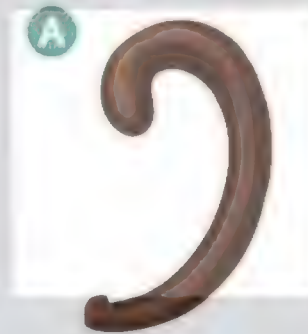
Duplicate this to make a square frame, but cut the corners at 45 degrees because they overlap.



Depending on the design of the picture frame, it may not be necessary to draw a relief, but adding a relief can add to the splendor of the design. Same relief as 1001. Use a large bokeh brush to create a three-dimensional effect.

In the example, the shape of is reversed left and right, and it looks like duplicates are lined up. There are various forms of relief, so it is a good idea to refer to various materials.

In addition, by making the innermost circular dotted line, we have increased the decorative drawing.



Here's a technique that can help if you're painting something that was originally intended to be wooden, but later need to be changed to gold.

\* Even if you try to change it to gold with only the [Hue/Saturation] of the color correction, it will not turn into gold even if it becomes yellow like the NG example

In addition to changing the hue, the golden color can be obtained by using the types of tonal corrections that emphasize contrast, such as [Level Correction], [Exposure], and [Tone Curve], which were also used in "Sakura"

(p.60). increase

Here, I use the [Level Correction] and [Hue/Saturation] adjustment layers (p.19).

① It is in a wooden state.

(2) Make adjustments with [Level Correction] on the adjustment layer.

vinegar

③ If you adjust the [Hue/Saturation] on the adjustment layer, it will turn gold.



[Level correction]  
slider: 5  
White slider 125



[Hue • Saturation]  
Hue:  
+10 E-10



Whether the change to gold due to color correction is successful depends on

01 It depends on the highlight I put in. The

point is to emphasize the contrast with [Level Correction]

and brighten the bright areas to make them look more

metallic, but there are no highlights in the original state.



No highlight



with highlights

If the difference in light and shade is too small, it will not be possible to

achieve a gold-like finish even if you adjust with [Level Correction] and

[Hue/Saturation]. If you can't get it to turn gold, make sure you've

added a good amount of highlighting.

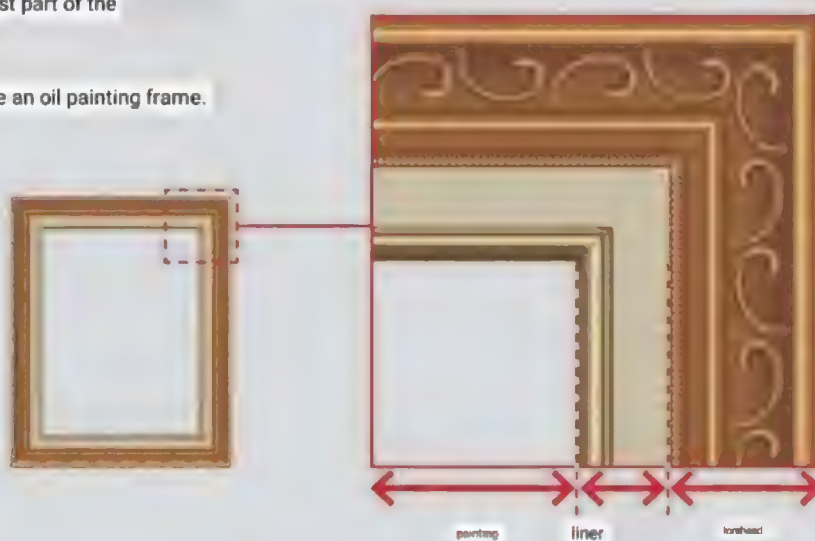
To prevent contact between the glass and the painting, there is a material called a liner, which is a cloth attached to the inside of the frame. If it is used in a close-up, I think it would be fine to draw the texture of the cloth, but in the example, I just change the color of the painting.

There is a part painted in gold on the innermost part of the liner, and the inside becomes a painting.

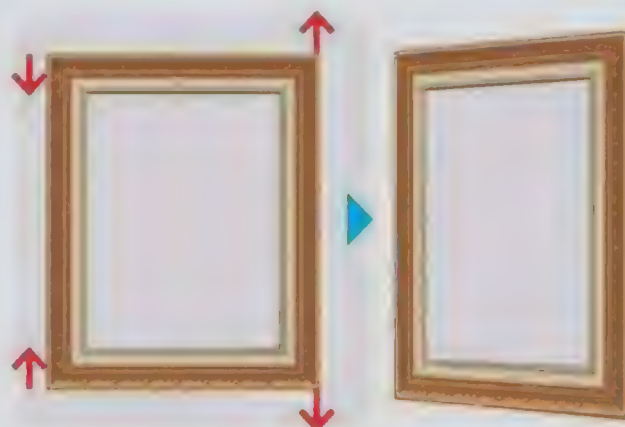
The liner is used to create a luxurious look like an oil painting frame.

In the case of a picture frame for a simple picture frame, it is a board made of paper called a paper mat.

Also, since the inside of the frame is basically made of glass or acrylic, specular reflection can be added, but it is omitted in the example.



Deform it according to the perspective of the wall. Since the object drawn on the plane will be deformed according to the base, I added thickness to the sides.



## 08

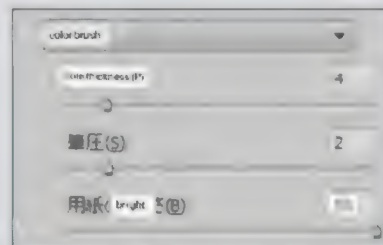
## paint a picture

Still lifes such as flowers, bottles, and fruits are safe and easy to use, so I drew branches and leaves in the example. See "Leaves" (p.56) and "Trees" (p.48)

for how to draw them. "I don't mind leaving the original paint, but sometimes I want to make a difference between the real thing and the painting, such as when there is a vase near the painting. You can create a more painting-like expression by

applying ] and blurring. First, execute [Filter] → [Texturizer] from the menu. The setting value is left as default.

Next, select [Filter] → [Artistic] → [Colored pencil] from the menu and set [Lead thickness] to "4", [Pen pressure] to "2", and [Paper brightness] to "Set to 50."



Texturizer and Colored Pencil filters

## 09

## sign a painting

By signing a painting, even an ordinary painting can be made to look like a work of art.







While double-sliding windows like the example shown are commonly used in Japanese homes, other types, such as double-hung windows, are more common in some countries.

In addition to the types of opening and closing methods, there are also types based on differences in placement. There are waist-high windows below the windows, floors below the windows, and sweeping windows at the height of . In the example, 掃 I will draw a sliding window with a sliding window (height 180cm, width 180cm).

The example is on the 1st floor, but there are points to note when drawing the sweeping windows on the 2nd floor. On the 1st floor, the height of the foundation is about 40 cm, not the ground, but the balcony on the 2nd floor has the same height inside and outside, so the 2nd floor sweep window is designed to prevent rainwater from entering. rise (step) is required.

However, the new ones have a structure that can drain water well, so you can eliminate the rise. Therefore, there is no problem in drawing the 2nd floor without a rise, but if the setting is not a new house, it is better not to make it flat so that the picture fits the setting.

### Drawing point

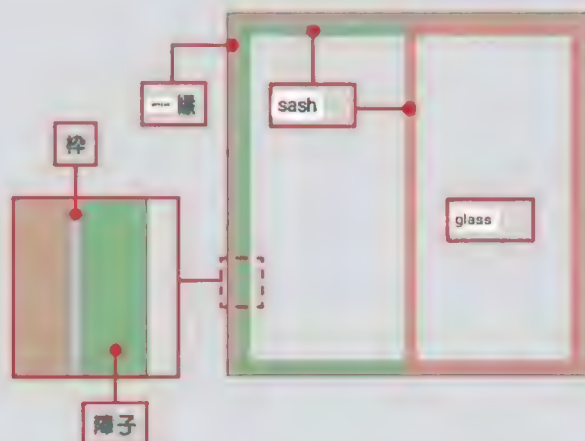
#### 01

draw a window frame on a plane

Windows can be broadly divided into "frames," "sashes," and "glass." The outermost part of the figure is the "frame". The sashes are colored green and red for explanation. A sash consists of a frame (the part attached to the wall) and a shoji (the part that moves). The sash on the right is in front.

Draw these on separate layers for each part.

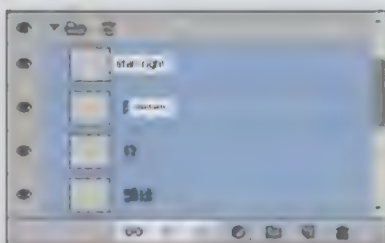
If it is a picture drawn like an example, you can just use the shoji without thinking about the frame, but if the window is open or if it is a foreground, you will need to draw the frame.



#### 02

transform the window frame

Both the sash and the frame are deformed according to the perspective. In the case of windows, the depth is different for each part, so it is better not to merge the layers because it will be moved after deformation. I guess.



#### 03

shift the sash layer

Shift the layers of the sash to create thickness from the frame to the sash.



## 04

## Draw the thickness of the sash

① Duplicate the red sash and lighten the color, then move it to match the perspective to create thickness.



② Slide the green sash to the left by the same amount as ①.



③ Duplicate the green sash to lighten the color, then move it to create thickness.

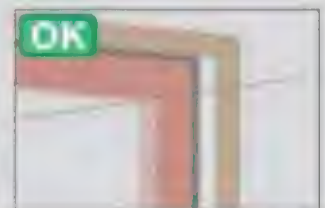
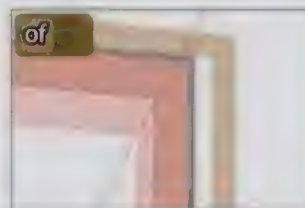
• Erase the part that sticks out.



## 05

## Notes on thickness

If you shift it carelessly without thinking about the verse, it will not match the perspective of the whole picture. Check the berth and shift it.



paint point

## 06

## color the sash

I changed the color of the window frame to grey. I used different colors for explanation, so you can actually paint with this color from the beginning. Gray is not a completely achromatic color, but a slightly bluish grey-blue with a large B value.





07

## Add a gradation to the sash

You probably won't notice the difference, but I used a large bokeh brush to add a slightly darker gradation.



08

## draw the thickness of the frame

Paint the thick part of the picture frame.

- 1 Since it is the outside of the window, paint it in a dark color and thin the thickness. The
- 2 color is a little brighter because there is light from the window inside the window to paint.

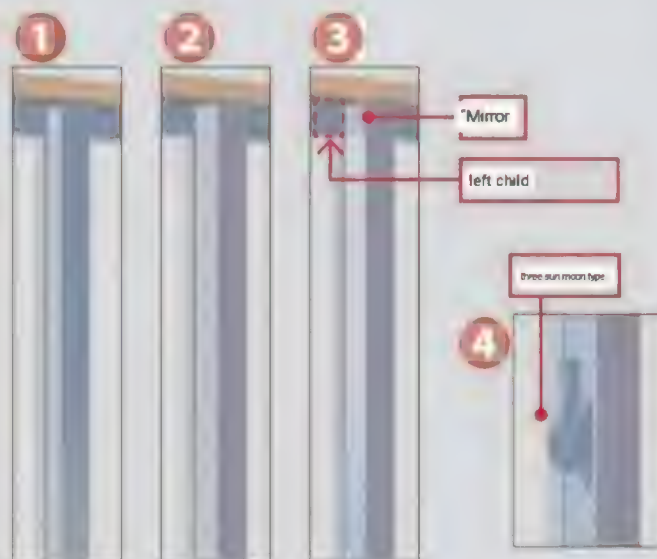


09

## Draw a shoji screen and a key

• This is the state before drawing.

- 2 The left part of the shoji in the foreground sticks out more than the others, making it easier to open the window with your hands. Draw the thickness for that amount.
- 3 Draw the sides. Draw in white or light blue with a large bokeh brush to create a gradation. The top part depicts the mirror image of the shoji on the left in dark colors. • Draw a crescent key. Crescent means crescent in English. It is a key that is often attached to aluminum sash double sliding windows, and the rotating semicircular part has a crescent shape. The installation position is in the middle position for windows with a height of 90 cm and a height of 180 cm.



10

## draw out the window

I brought the tree I made in "Trees" (p.48) and placed it outside the window.

You can simply draw the outside of the window on a layer below the window layer, but you can also select the window glass area and layer mask it in a layer group.

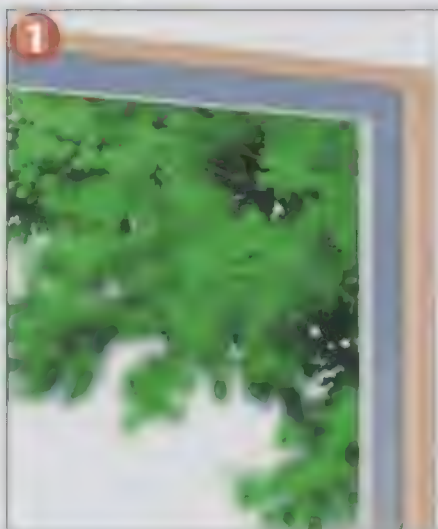


- ① If the shape is too clear even after removing the color in the following process, lightly blur it with the [Gaussian Blur] filter first.
- ② Duplicate the tree layer, change the blending mode of the duplicated layer to [Linear Dodge] and set the [Opacity] to "50%". This will make the wood color brighter and more vivid. If you duplicate and overlap, the color will fly out and become a color like ③. If you can't get the color you envisioned, try adjusting the number of duplicates, changing the layer's [Opacity], or changing the blending mode to [Screen].

- ③ Create a new layer and set the blending mode of the layer to [Screen] or [Overlay]. Use a bluish-white color and paint with a large bokeh brush to adjust the splatter and color.

#### memo Points to note when splashing colors

Skipping colors in this way produces vivid colors, but when used on paper media, the color gamut becomes CMYK, which has a narrow color gamut. This kind of expression can be used effectively because it can be displayed in the RGB color gamut when displaying images on a monitor such as games or illustrations published on the Internet.

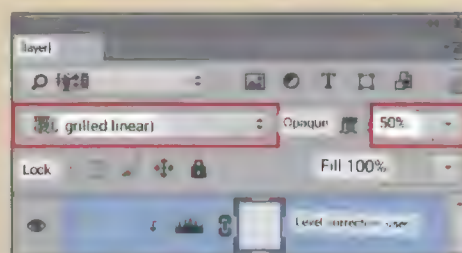


#### memo How to reduce file size

The tree layer is duplicated in ②, but the file size will increase if you duplicate it many times. Increase file size. I will show you how to get almost the same effect without messing it up.

Create a Levels adjustment layer instead of duplicating the tree layer. I don't change the [Level Correction] value itself, just change the blending mode to [Linear Dodge] and set the "Opacity" to "50%". If the color is not what you envisioned, adjust it by stacking multiple adjustment layers, changing the [Opacity], or changing the blending mode.

In this case, only the adjustment layers are increasing, so the file size doesn't increase.



In order to make it easier to see that there is glass, white is added near the boundary between the glass and the sash so that the trees outside are interrupted.





# curtain



There are various types of curtains, such as grommet style and tab style without folds, and pleated curtains with folds. Regarding the top of the curtain, there are types where the curtain rail is visible, and there is a type where the top of the curtain is hidden by a curtain box as shown in the example, and in the case of high-class curtains, a fabric top decoration called valance is used. . Furthermore, tassels for bundling curtains include boat-shaped tassels, tassels with frills and other decorations, and rope-like loop tassels.

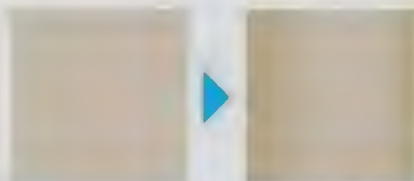
Here we draw a pleated curtain with a boat tassel and a curtain box.

## paint point

01

### Draw the gradation of the curtain cloth

Make a base layer of curtain cloth (R232, G223, B200). Apply a slightly darker color on both sides with a large bokeh brush to create a gradient.

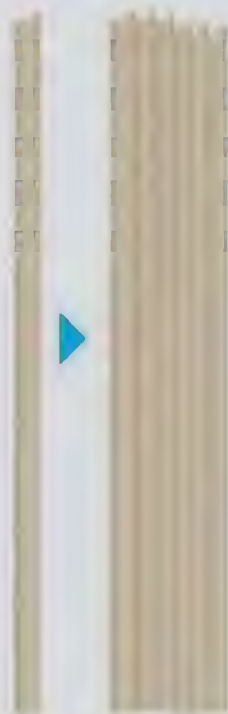


02

### Arrange the curtain cloth

Extend the gradation drawn in 001 vertically to create a pile of curtain cloth. Then duplicate it and line it up.

Skip 3 to 5 if you are drawing a curtain that is not closed with tassels.



03

### transform the curtain cloth

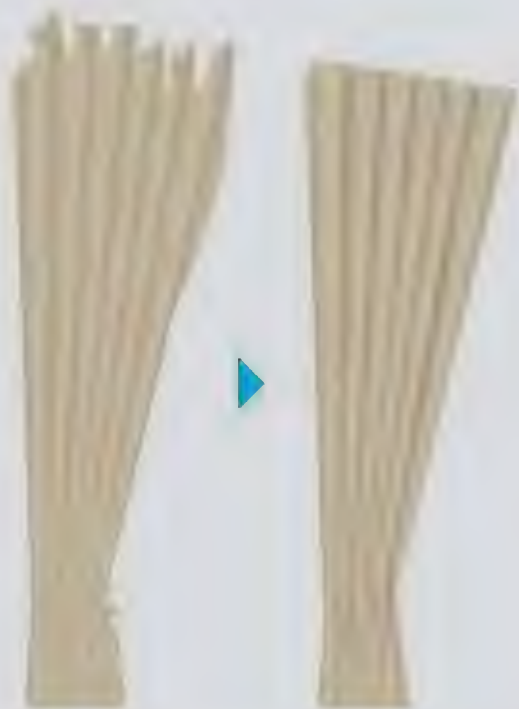
Select only half of the curtain cloth with area selection, divide the top and bottom, and bend the shape with the [Free Transform] function. After deforming the upper part as shown in the figure, the lower part is also deformed in the same way. The bottom should not be as wide as the top.



04

trim the curtain cloth

Erase the disordered state after deformation with the [Eraser Tool] arrange. At the same time, paint in a slightly darker color to create some contrast in some areas.

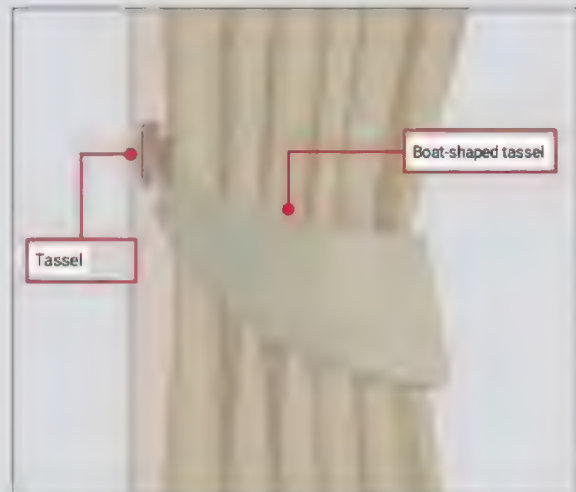


05

draw a tassel

A tassel is a string or tassel that holds the curtain cloth together. A string at the end of the shaped tassel hangs on the tassel attached to the window frame.

For the sake of explanation, I have also drawn the tassels, but if it is close enough to see the entire curtain like in the example, it would be fine to draw only the tassels and omit the tassels without drawing them.

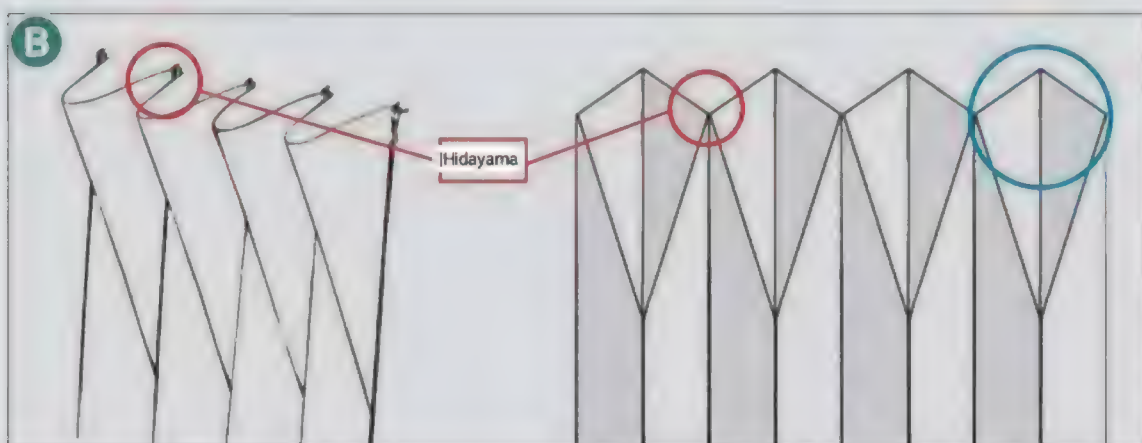
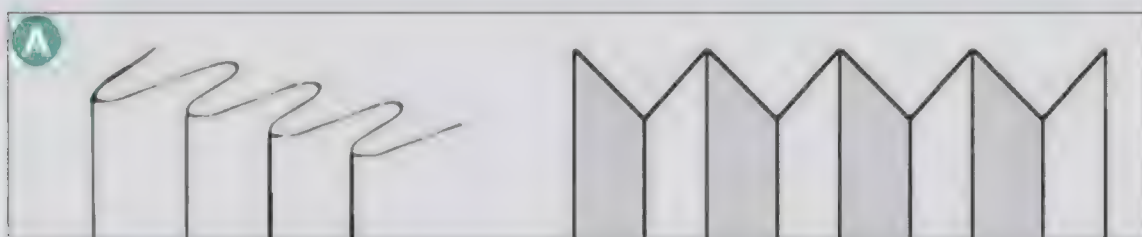


06

The structure of the peaks and valleys of the curtain cloth

An eyelet style without folds is composed of simple peaks and valleys as shown in the figure below. On the other hand, pleated curtains are folded like , where the valleys on the bottom of the curtain are folded into mountains on the top. Hida-yama is circled in red. Place with folds

is a valley at the top of the curtain, but a peak at the bottom. In addition, when the curtain is closed, the upper ridge, which is circled in blue, forms a clear ridge as shown in this figure, but when the curtain is opened, it is stretched and becomes flat. increase.





This step can be skipped if you are drawing a pleated curtain  
and if you are drawing a curtain that looks like a man. Here, the folds

**B** of the blue circled part of G are drawn.

In addition, the pleated curtain has 6 pleats made by folding and sewing the fabric.

**B** ), but in the example, these folds are not drawn because  
they are hidden by the curtain box drawn in .



mama

Hidayama (two mountains)

Although it is not drawn in the example because it is hidden,

The part of Mt. Da (day 06) looks like the following  
picture. Put the hook on the back side of this crimp.

I'm hanging out.

Many products have 2 piles, and order  
curtains have 3 piles.



After drawing one curtain, draw the other side. It is also  
possible to copy and transform.

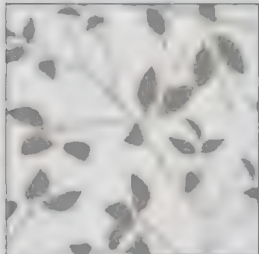
Since the direction of the tassel is reversed, from the menu, select [Edit] [Transform] →  
Flip in [Horizontal direction].

Instead of flipping the curtain body horizontally, use Edit > Transform >  
Free Transform. Select the range by dividing it at the position where the  
tassel is, and transform it up and down. At this time, the borders  
are interrupted and disordered like , but you can hide the borders  
with a tassel layer like , so you don't need to fix it.

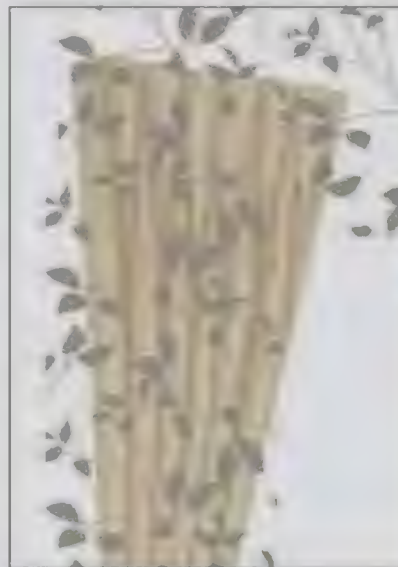


Put the pattern on the curtain cloth. In the example, I desaturated the leaf image created in "Frame and Painting" (p.144), duplicated it, and arranged it to use as the pattern texture.

Make a clipping mask on the curtain layer so the texture doesn't stick out.

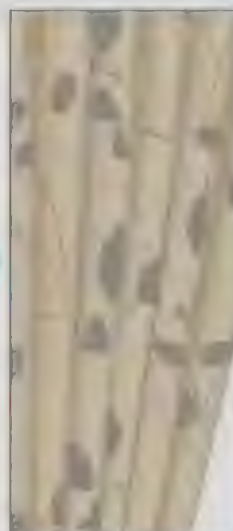


pattern texture

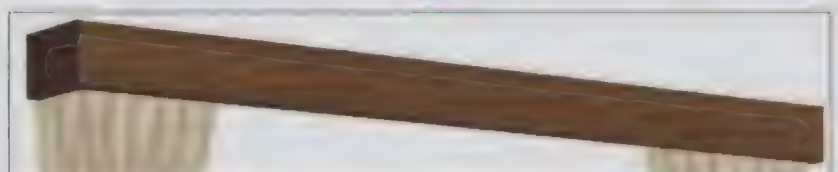


If you just paste it, the pattern will not follow the three-dimensional shape. On the other hand, it takes too much time and effort to transform everything to fit the three-dimensional **F** shape. Just by erasing the pattern at the part where it is bent like the arrow in , the pattern will match the unevenness of the fabric without being deformed.

Furthermore, by setting the [Opacity] of the pattern layer to "25%", it blends in with the fabric.



Draw a curtain box. Draw the wood grain in the same way as "Lowboard" (p.104). The curtain box has the function of hiding the top of the curtain and preventing light leakage.





# school chair



The seat height of the chair is 40 cm, and the height from the seat to the top of the desk is 30 cm, and the height of the desk top is  $40 + 30$  and 70 cm, which is the general size of a desk and chair. School chairs come in a variety of sizes to suit the body shape of each grade, but here we will explain about size 5, which is close to general sizes, with a depth of 38 cm, a width of 36 cm, a seat height of 42 cm, and a total height of 74 cm. .

Compared to the character, the height of the seat is about knee high. The average knee length for a 160cm woman is 39cm. The overall height of the chair (height above the back) is slightly higher than the height of the desk.

When drawing a rough fit, draw two cubes with sides of about 40 cm on top of each other, and draw the bottom cube up to the seat board and the top cube up to the back board.

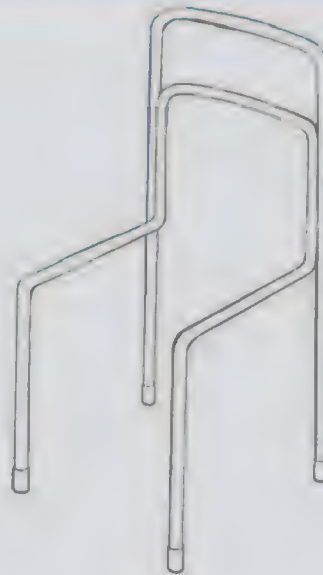
## Drawing point

01

### school chair structure

The most common image of a school chair is the combination of two pipe legs: the rear legs on the outside of the back and the front legs that bend from the inside of the back to support the seat. It's the type that is

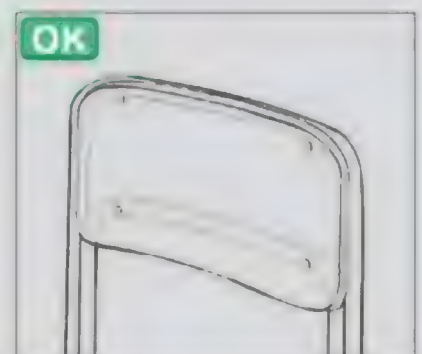
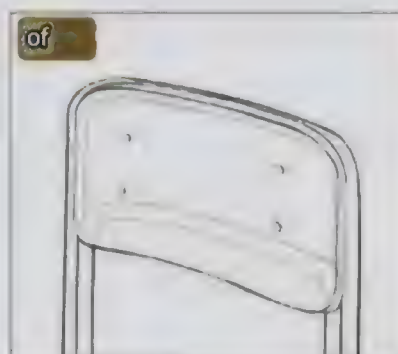
confused. The back and seat are fixed to this pipe with rivets to form a chair.



02

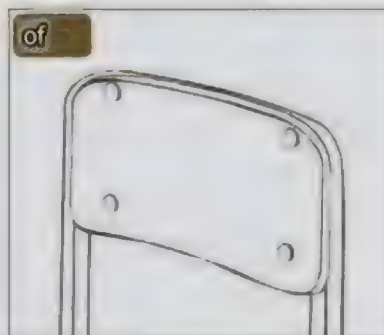
### Precautions for rivets, back plate and seat plate

The rivets are for fixing the chair and the board, so the rivets should be in the same position as the pipe.



different rivet positions

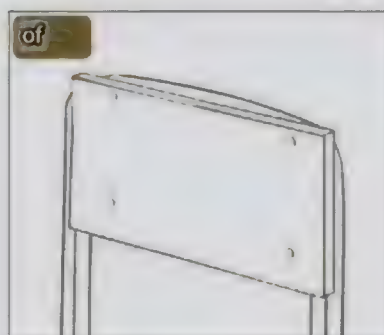
If the size of the rivet is the same as the diameter of the pipe, it is a little too big. Unless you're doing it on purpose for comical expression, make the rivets one size smaller than the pipe



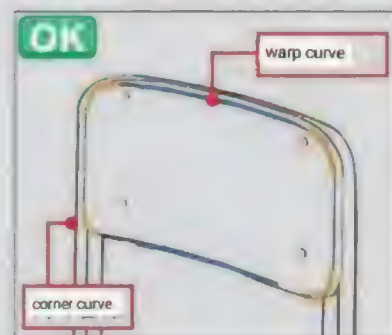
rivet too big



The back plate has two types of curves. "Corner This curve" and "Curve where the plate warps with the pipe as a whole". With a slight curve, you might want to draw it straight, but by making a proper curve, the backboard-likeness will come out.



The corners of the plate are not curved



The seat plate also has curved corners. Furthermore, the front side is slightly bent downward.



## paint point

### 03

### paint the back and seat

- Fill the back and seat with ocher (R200, G111, B23) and the pipe with gray (R120, G130, B140).

- 2 Create a new layer and fill the thickness with a darker color (R90, G50, B10).

- 3 Lightens the color of the brighter areas of thickness (the upper surface of the back panel and the side surface of the seat panel facing the light source). The corners are curved rather than right-angled, so paint with a gradation.

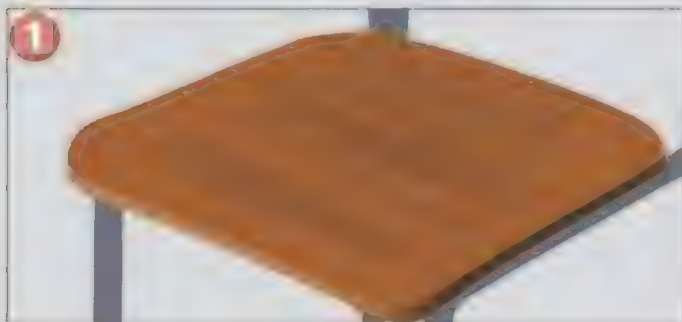




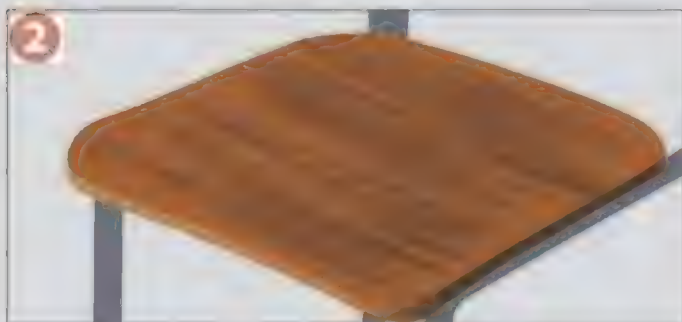
## 04

## Paint the wood grain on the back and seat

- Add wood grain to the back and seat. Stroke with the brush according to the perspective of the board.



(2) Continue to paint over the entire board.



- 3 The wood grain is too conspicuous and has become dirty. Lower the [Opacity] of the brush and paint while picking up the color with the eyedropper.



If this process is difficult, you can substitute it by pasting the texture of the photo according to the perspective. In that case, lower the [Opacity] of the texture so that the texture does not become too strong and unnatural.

## 05

## highlight corners

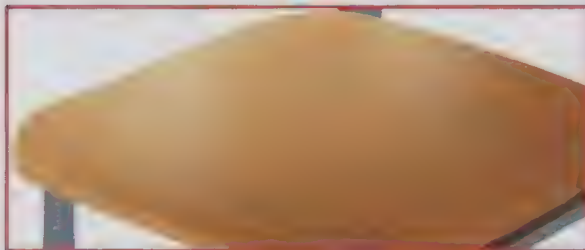
Highlight the corners with a pluckable brush.



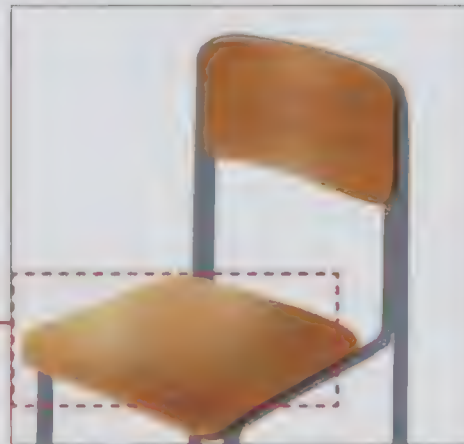
## 06

## add light gradation

"Select the area so that it doesn't stick out, then paint it lightly with a large poke brush, and then adjust the shape with this large eraser tool. Blending mode



を Paint a layer with powder color (R244, G221 B165) on a layer with [Normal] and [Opacity] set to "95%", and then add a layer with blending mode set to [Screen] and [Opacity] set to "70%". Overlap and paint with tan (R228, G158, B97).



## 07

## apply rivets

If the rivet is far away, it may be a single color point, but if it is close, highlight it.



## 08

## paint pipe legs

The pipe is painted in the same way as the metal rod of the "low table" (p.109). Paint the cap in different colors. I used white (R240, G215, B205) here, but you can also use gray or black. The cap part is slightly thicker than the pipe part.





# school desk



The height of the chair is 40 cm, the height from the seat to the desk top is 30 cm, and the height of the desk top is  $40 + 30 = 70$  cm. School desks come in a variety of sizes to suit different body types, but here, we will use size 5, which is 45 cm deep, 65 cm wide, and 70 cm high, which is close to general sizes.

The average crotch length for a 160cm woman is about 72cm, so keep in mind that the desk should be about the same height as your crotch.

## Explanation of parts and drawing points

01

### desk structure

#### vibe

There are 4 pipes in total, 2 U-shaped legs and 2 reinforcing pipes.

#### reinforcement pipe

A single pipe is bent into a U-shape and connected to four desk legs for reinforcement. Positionally used as a footrest.

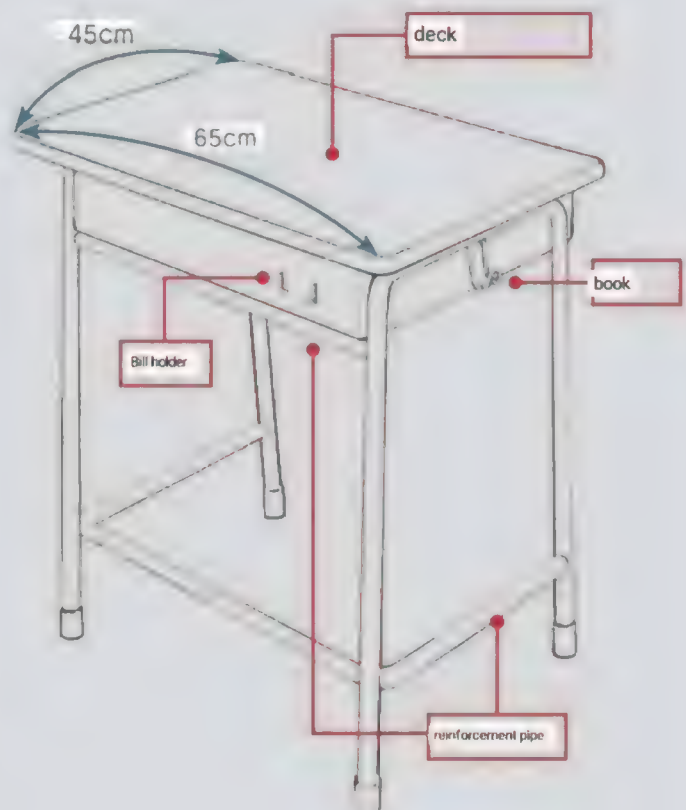
There is also a straight reinforcing pipe under the bill holder.

#### hook

It is made by bending a single steel wire. The hooks are attached inside the side pipes.

#### Bill holder

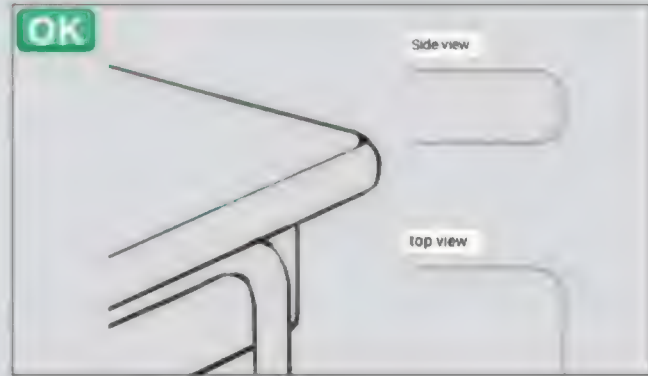
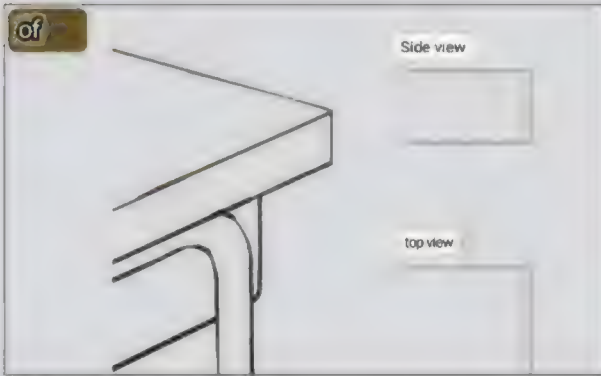
It is molded so that you can put a name tag etc. on the outside of the storage. Even if you don't draw the bill holder, it will still be a picture of the desk, but it will make it easier to see that it is outside the closet. For example, a black-and-white picture without a reinforcing pipe and bill holder makes it difficult to judge the front and back of the desk at a glance.



## 02

### Curve the corners of the deck

The corners of the deck are curved rather than square. Both sides and top are curved.



## 03

### Bend the pipe into concentric circles

If the inside of the corner part is a right angle, the corner part is not cylindrical. If it is bent in a cylindrical shape, try to make concentric circles.

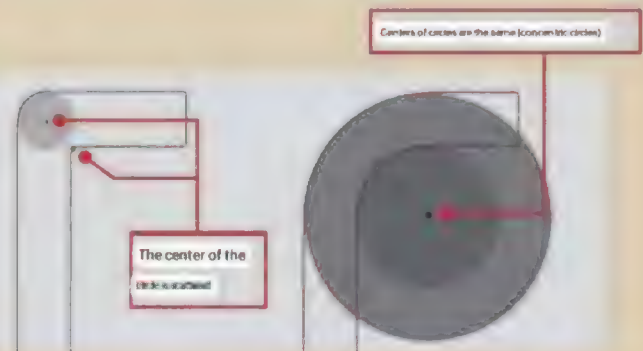


#### memo

What are concentric circles

Concentric circles are circles with the same center but different radii. If the inside is squared, the square will become the center of a small dot-like circle, so it will no longer be concentric.

This is not limited to desks and chairs, but it is a point to be aware of when bending cylindrical objects such as pipes, so remember it.

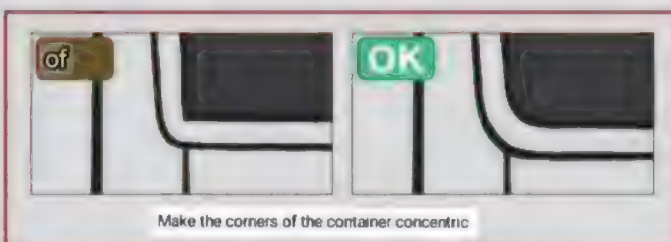


## 04

### structure of storage

The example does not show the storage side, but here I will explain the points on the storage side. The height of the storage compartment is about 9 cm, the width is about 55 cm, and the depth is about

35 cm. In the background, you can see the gap between the bill holders brightly. However, I probably won't have many chances to draw because I omit things and things are on my desk.





## 05

### Draw the light and dark of the deck

School desks can be painted in the same way as school chairs

But let's keep the following points in mind. It is a good

idea to be conscious of specular reflection (p.110) when adding light and dark to the deck. Partial lighting of the deck makes it look better. In that case, it is basic to be conscious of the light

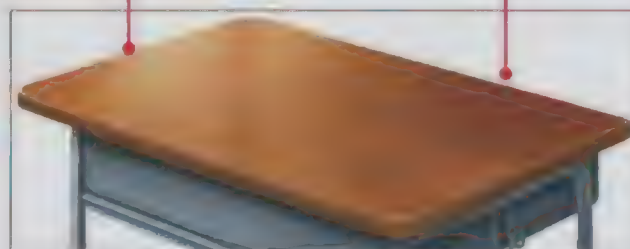
source such as the window and brighten it as a mirror image.

If the light source is not in a convenient position, there is no discomfort. As long as it's about the same, you can be flexible without thinking strictly about the position of the light source.



Make it dark with specular reflection  
(reflection of chairs etc.) in mind

Brighten with specular reflection  
(window reflection) in mind



## 06

### draw the shadow of the deck

The deck is wider than the storage and pipes, so the shadow of the deck is put in the storage.



## 07

### draw the sides of the deck

The deck part is plywood and the surface is melamine veneer.

It is a good idea to draw light and dark striped patterns on the sides of the deck to express the layering of plywood planks combined with thin boards. However, this is for close range. For long distances, this drawing can be omitted without any problem.



Striped pattern of overlapping plywood boards

# school blackboard



Blackboards are generally 90cm or 1m20cm high. The width of the chalkboard comes in multiples of 90cm, such as 1m80cm, 2m70cm, 3m60cm, 4m50cm and 5m40cm. Here, we will draw a standard size flat blackboard with a height of 1m20cm and a width of 3m60cm.

## Explanation of parts and drawing points

### 01

#### Blackboard type

School blackboards are divided into flat blackboards, curved blackboards, and semi-curved blackboards, depending on the shape of the surface.

There are also movable blackboards that can be used by switching multiple blackboard surfaces, such as two-ply upper and lower blackboards (height 1m80cm) and drawer blackboards. These movable chalkboards are often used in special classrooms such as science and music rooms.

flat

The flat blackboard is a low-cost, standard type.

surface

A curved blackboard is a type with both ends bent. The letters are easy to see from any seat because they are curved so as not to reflect light.

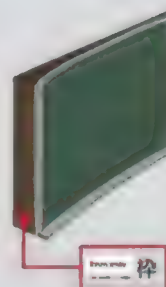
half surface

The semi-curved chalkboard is curved only on the window side and flat on the corridor side.



distorted frame

For curved chalkboards, a 15cm to 20cm waste frame is provided separately from the normal aluminum frame to cover the difference in thickness between the flat part and the curved edge.

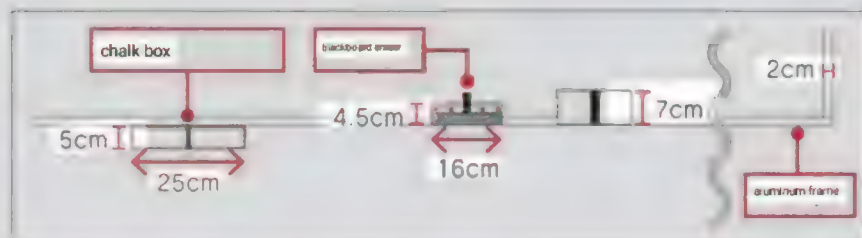
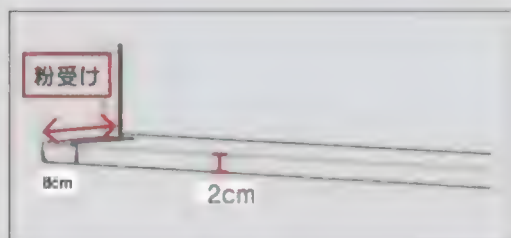


### 02

#### member size

The dust pan is attached to the bottom of the blackboard and is the part that catches the chalk dust. Please refer to the sizes illustrated in the illustration.

With that in mind, draw a chalk box near the powder tray, a blackboard eraser, and an aluminum frame.





## 03

## add a gradient

- Color the blackboard green. It used to be literally black, but in 1954 the JIS standard for blackboards was enacted and the color was changed from black to green. I will add a dark gradation later, so I chose a lighter, less saturated green (R67, G106, B83) as the base color.

- (2) Add a gradation. I used a large bokeh brush instead of the gradation tool. It may look like the gradation is only on the right side, but the left, top and bottom are also faintly gradated.



## 04

## paint horizontally

- ① Create a layer for the uneven eraser traces of the blackboard eraser. Use a brush with a low Opacity and paint horizontally with white. It doesn't matter how you apply it. It's like when you actually erase a blackboard with a blackboard eraser. I am using the "Custom brush" brush (p.9).

- (2) Lower the layer's [Opacity] to about 10%. The figure of 10% is a guideline, so it's a good idea to adjust the darkness visually.



## 05

## paint vertically

- ① Create a layer in the same way as 04 and paint vertically this time. I will.

- ② Lower the layer's [Opacity] in the same way as in step 4.



06

## paint without direction

- This time, paint around the center of the blackboard without determining the direction

2 Lower the layer's [Opacity] in the same way as in the previous step.

1



2



07

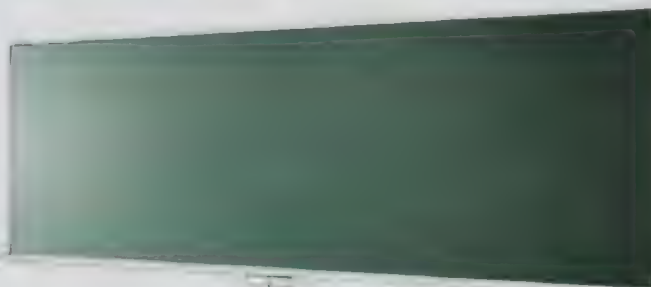
## Add a bright gradation to the window side

Brighten the left side of the blackboard by setting the light source to be on the left side of the classroom. The classrooms are generally arranged with south on the left, north on the right, and a hallway, with the pulpit on the west. With this arrangement, the light comes from the left, so the shadow of the hand does not get in the way when a right-handed person

Maximize the bokeh with a good brush size and click once to create a gradation.

writing

"I will add the gradation of light with a large bokeh brush.



08

## Apply a thin gradation to the aluminum frame

The aluminum frame can be a single color, but if you use a large-footed brush to apply a thin gradation, the texture will increase. Here, assuming that the blackboard light is on, the area around this position is brightened.



09

## Enter text such as date

Depending on the setting, letters such as 'Month', 'Day', 'Day of the week', and 'Daily' may be put on the edge of the blackboard. However, in the case of a single picture such as an illustration, is not the month, but in the case of a background used in a game, etc., if the date is known, a difference will be required each time it is a different day. It is a good idea to use characters that make it difficult to distinguish between blanks.



10

## paint the sides dark

Finish by painting the aluminum frame and the sides of the chalk box with a dark color. Placing a chalkboard eraser in the powder tray will make it look more like a chalkboard.





# lectern and podium



The example lecturer's desk is made of steel. The deck is plywood and the surface is melamine veneer.

A melamine decorative board is a plastic board laminated with melamine resin and has a layer of wood grain pattern on the surface. The size of the teaching car is 80 cm wide, 45 cm deep and 70 cm to 1 m 10 cm high, and the example is 90 cm high. The sample podium is made of wood. The size of the podium is 1m80cm wide, 90cm or 1m20cm deep, and 15~20cm high. In the example, two teaching platforms of the same size as tatami mats and fusuma (180 x 90 cm) are lined up. If you put two side by side, it will be the same width as a 3m60cm blackboard.

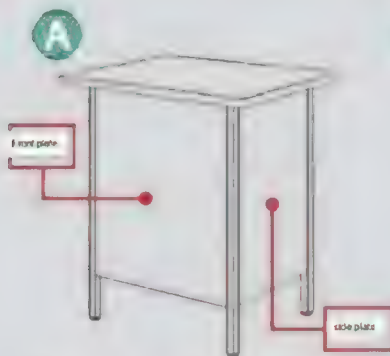
## Drawing point

### 01

#### Lectern structure

There are many variations in the design of the lectern. The material of the front plate and side plate is not only steel plate, but also wood such as plywood. Also, the arrangement of the desks is different. The lectern is placed on the podium.

In some cases, it is placed in front of the podium. However, the lectern placed on top of the podium is often at a height that does not cover the blackboard.



A type surrounded by a front plate and a side plate



Type without side plate



Type with no gap below

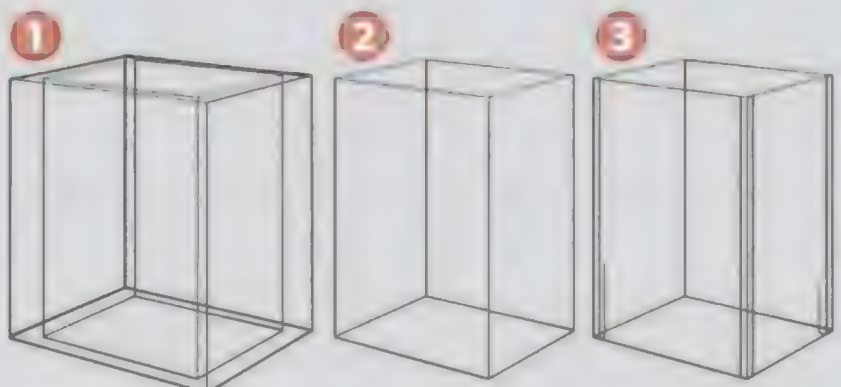
### 02

#### Draw a classroom with a cuboid shape

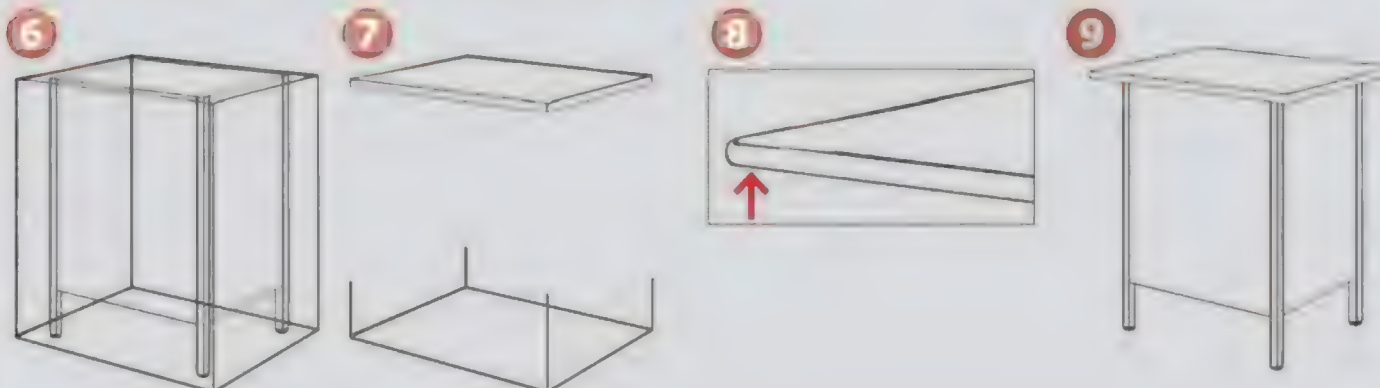
-Double cuboids are drawn. The inner rectangular parallelepiped is for the legs, front plate and side plates, and the outer rectangular parallelepiped is for the deck.

(2) Hide the Atari on the deck once.

③ Draw parallel lines inside the cuboid to draw the legs. The part that is hidden by the front plate will be erased anyway, so I do not draw it and stop the line in the middle.



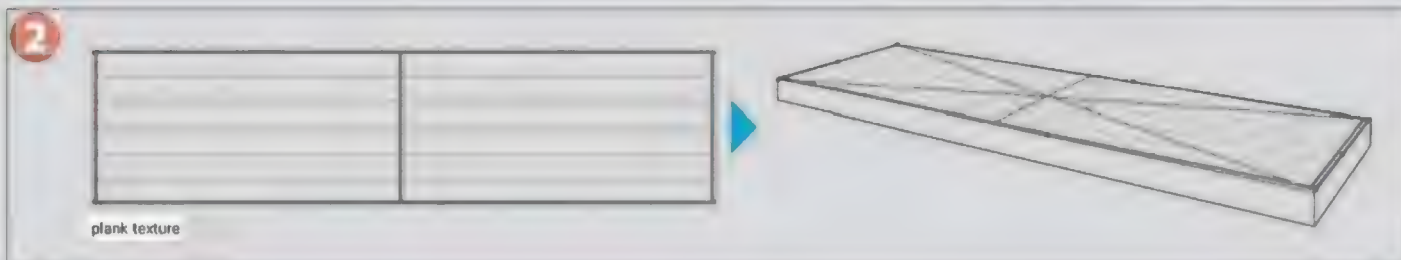
- 4 • Erase lines that are no longer needed.
- 5 Draw lines for the front and side panels.
- 6 Shows the bite of the deck.
- 7 Hide the side plates and legs, draw a line for the thickness of the deck, and erase unnecessary marks.
- 8 Make the corners curved like the desk deck (p.161).
- Display the side plate etc. and it is completed. This method of using a cuboid to draw a line can be used in the same way when drawing desks and chairs.



03

### draw a pulpit

- ① The line drawing of the pulpit is just a board-shaped rectangular parallelepiped. ② Since the board of the podium is evenly spaced, it is easy to create it using the [Distribution] function (p.177). The texture of the created board can be pasted on the rectangular parallelepiped with the [Free Transform] function to efficiently draw a podium that matches the verse.



04

### Change the brightness for each face of the podium

If all the colors are the same, the difference between the faces cannot be seen.

Set the window, which is the light source, to be on the left, and darken the right side. color.





05

draw wood grain

The wood grain is drawn with a brush with [Opacity] lowered (p.105). [Opacity] of the layer after adding grain

to adjust the darkness.



06

adjust wood color

Using two layers with [Overlay] and [Screen] blending modes, I add a bright gradation with a large bokeh brush. With only [Overlay], the colors are too harsh, and with only [Screen], it is difficult to change the saturation, so I used two layers.

By layering both blending modes, you can adjust to a good color tone.

In addition, create a layer with the blending mode set to [Multiply] or [Normal], and add a dark gradation with a large bokeh brush to the area indicated by the arrow in the figure.

overlay only



screen only



both



07

Draw the specular reflection of the lectern

The deck of the lectern is basically the same as the painting of the school desks and chairs. In the case of the desk, the reflection of the chairs made the deck bright and dark, but in the case of the lecturer's desk, the blackboard is reflected, so it would be nice to reflect the green color of the blackboard a little accordingly.

In addition, the podium is mirror-reflected on the side plate. Although not drawn in the example, if there is a desk in front of the teacher's desk, draw a mirror image of the desk on the front panel. This specular reflection is a drawing element, so it can be omitted when the teacher's desk is far from the viewpoint from the back of the classroom.



08

Draw in dark lines for highlights and grooves

Here, we have drawn a flat lecturer's desk with no steps between the legs and the front and side panels, so we have not included shadows cast by the steps on the front panel. I added a dark line and a highlight line next to it to express the groove that connects the leg and board. I also added highlights to the corners of the legs to make them brighter.



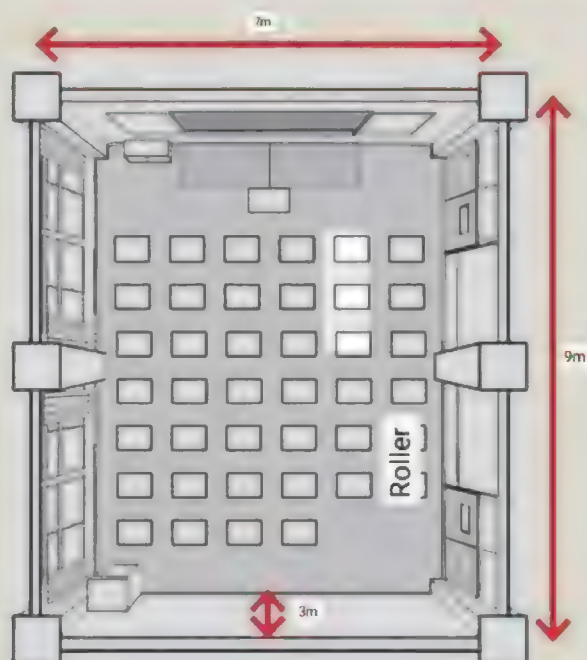
## 01 Standard size for classrooms

The standard size of a school classroom is 7 x 9 x 3 m. The Standard Design for Reinforced Concrete School Buildings, which was created in 1950, follows the size of 4 ken in depth and 5 ken in frontage from the Meiji period, and is 7 x 9 m. There are many classrooms.

Currently, there are no clear standards for the size of classrooms, but there are standards for floor space, such as a minimum of 1.5 m<sup>2</sup> per student. For a class of 40 students, the space is 60m, so there are many more such as 63m<sup>2</sup> (7x9m) and 64m<sup>2</sup> (8x8m).

Article 21 of the Enforcement Ordinance of the Building Standards Law stipulated a height limit of 3 m or more, but this was abolished in 2005. In the setting of a relatively new school building, a height of 3m or less is not a problem.

The height of the ceiling in a room in a typical house is about 2m 40cm, so the ceiling of 3m is high, but if it was about that high, it would be a classroom-like picture. Considering the height of two women with a height of 150 cm, it is a guideline.

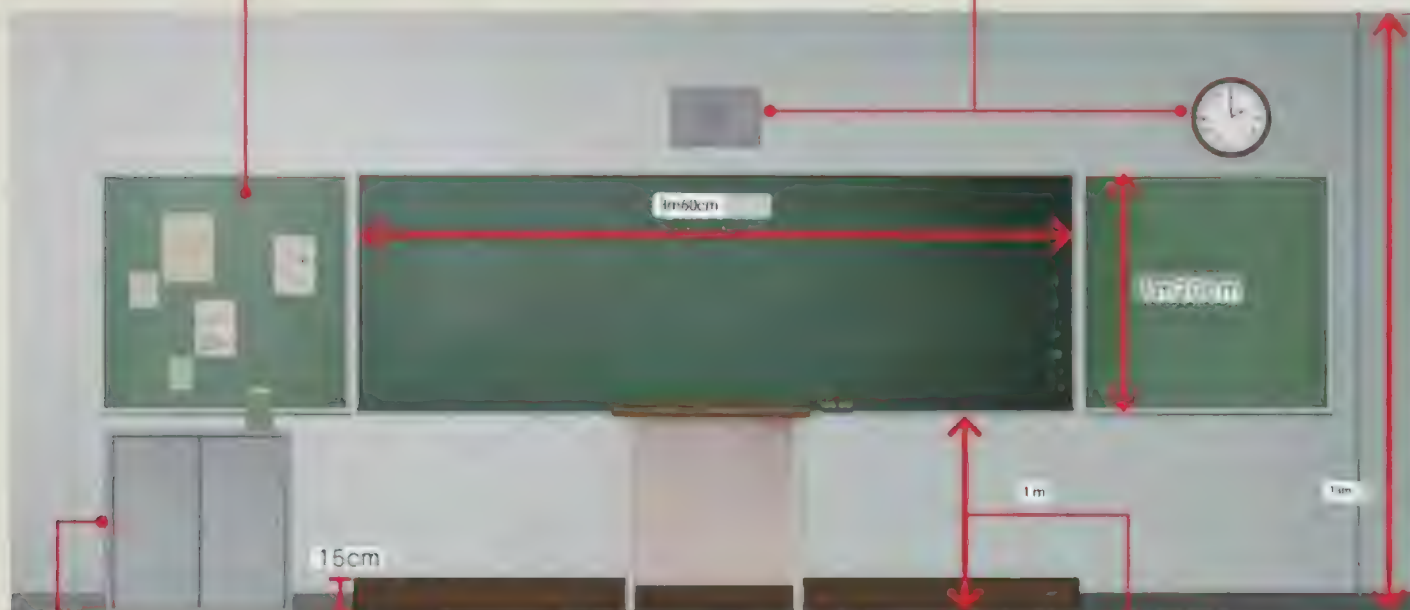


ほ

## 02 blackboard point

The blackboard can be wide enough to run the length of the classroom, but often a bulletin board is drawn next to the blackboard to increase the color variation and the amount of information in the picture. is.

Speakers, clocks, etc. Contrary to this figure, it is OK to place the clock in the center. If you draw more than one school, you can change the position by changing the position, using a clock integrated with the speaker, or displaying a certificate.

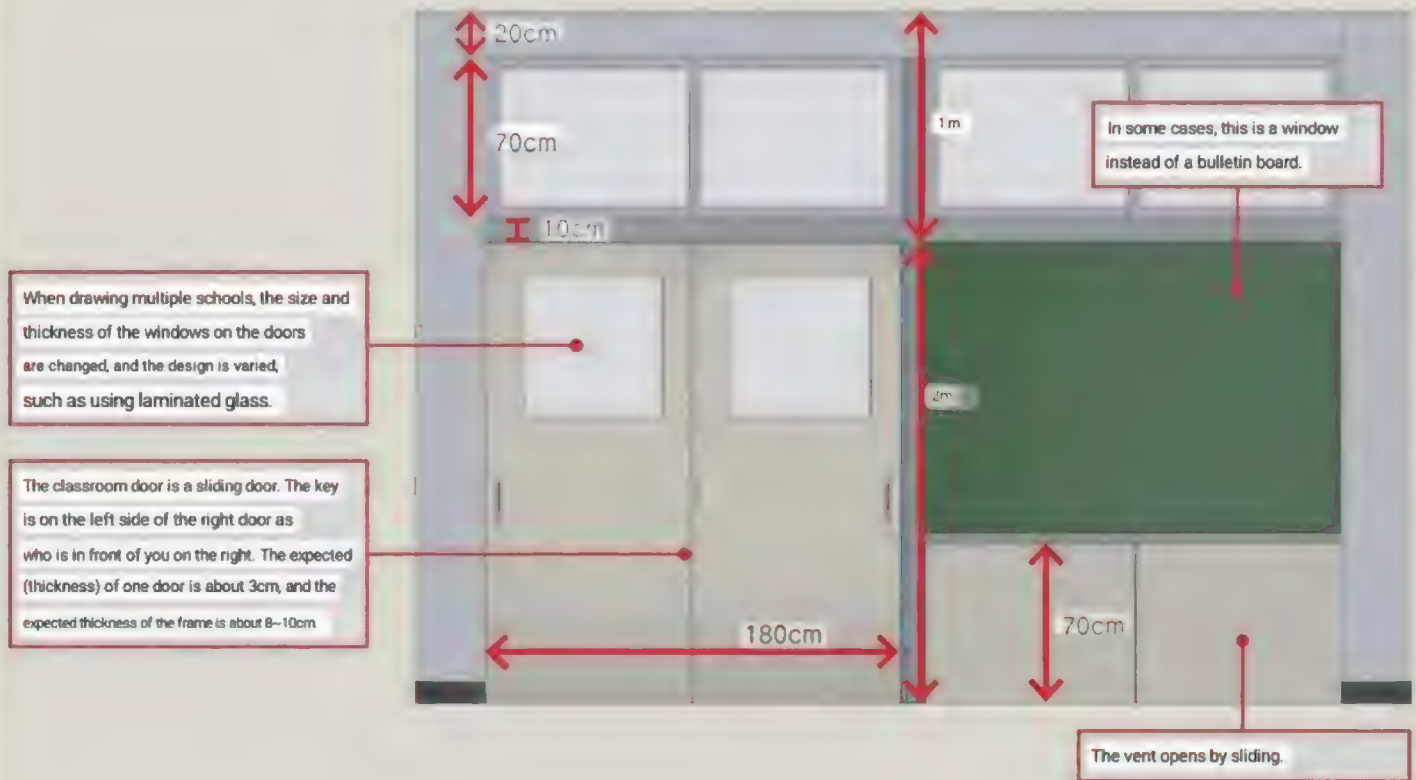


I often draw steel archives. A chalkboard eraser and a vase are above the steel archives. Draw files etc.

Since the height of the lectern is about 1m, the characters on the blackboard are the lectern. The bottom edge of the blackboard should also be about 1m so that it is not obscured. However, in the case of elementary schools, etc., the position of the teacher's desk and the blackboard should be lowered by about 10 to 20 cm.

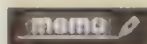
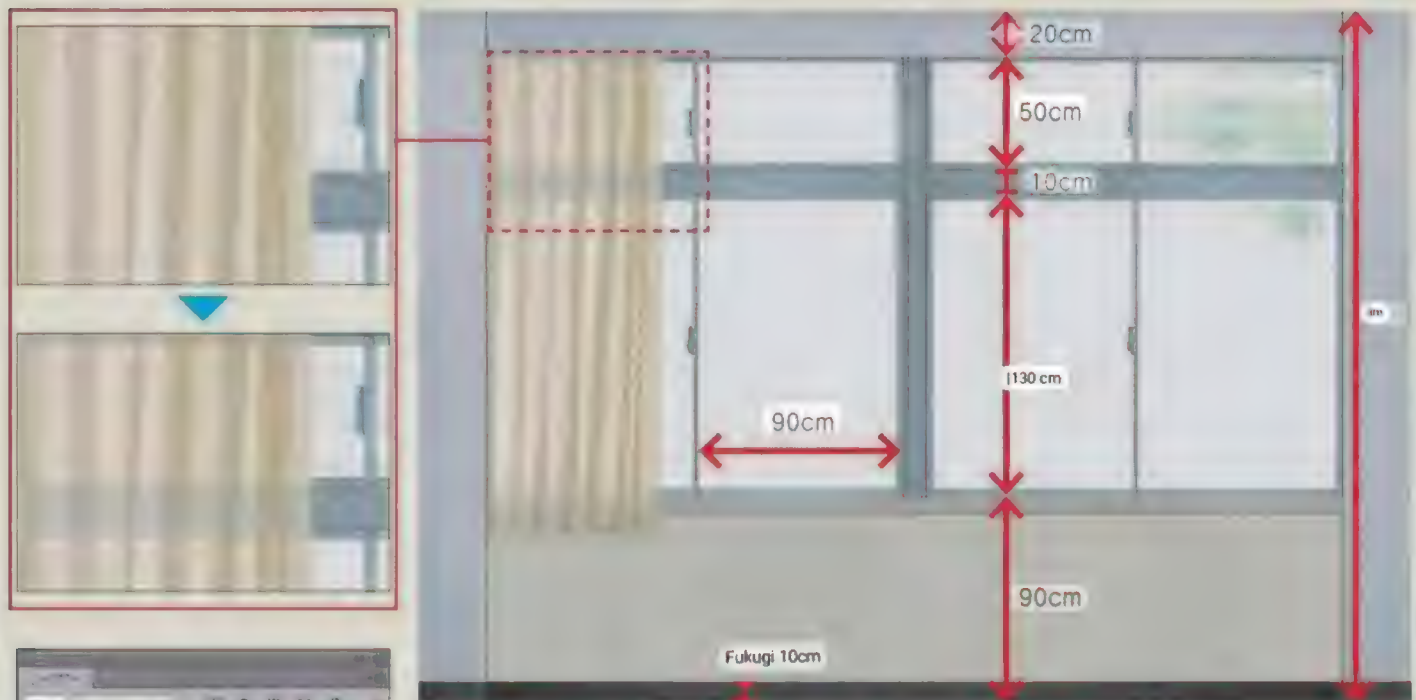


### 03 Corridor point



### 04 Window side point

Create a layer with [Opacity] set to "25%" and draw the shadow of the window frame falling on the curtain. In the figure, the shadows are straight, but if you are particular about it, it would be even better if you bend the shape of the window frame shadows to match the ridges and troughs of the curtains.



#### window size

The effective lighting surface is determined to be 1/7 or more of the floor area of a living room in a house, and 1/5 or more of the floor area in a classroom.

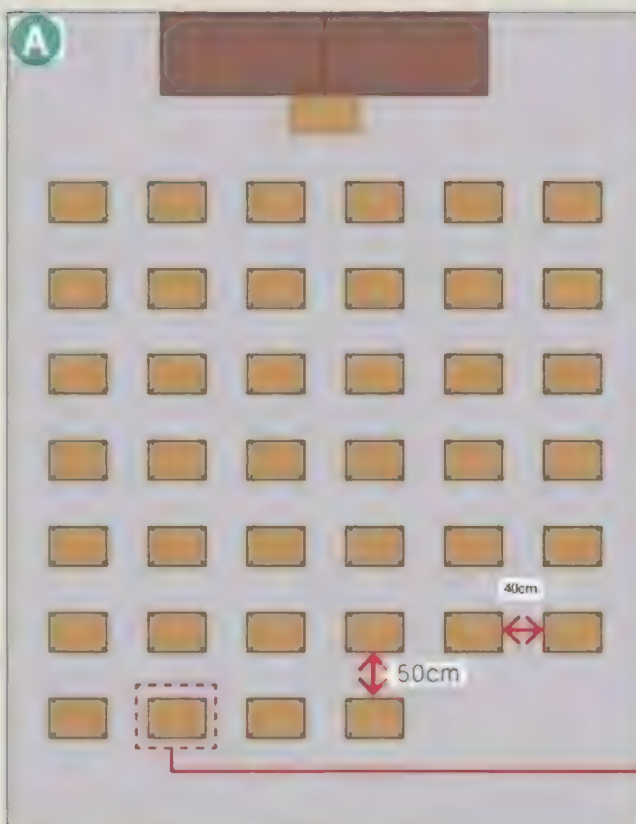
I'm here. So, you need a window wider than the living room of the house. If the floor area is 63m (7×9m),  $63 \div 5 = 12.6$ , so an opening of 12.6m<sup>2</sup> is required.

For example, if there are 8 windows with a width of 90 cm, the total width will be 7 m20 cm.

At this time, the required window height is  $12.6 \div 7.2 = 1.75$ , which means that it is 1m75cm or more.

## 05 Arrangement of desks

After drawing the layout of the desk and lectern in the top view and turning it into a smart object (p.98), I transform it to fit the perspective. This will give you an idea of where to draw the desk or lectern. It will be easier to draw if you create a cuboid hit based on this floor rectangle as explained in "Lecturer's desk and podium" (p.166). In the diagram, the desks are arranged exactly, but in the actual classroom, they are arranged by hand, so it would be more realistic if there were some misalignment. tee increases. Sometimes I intentionally shift to express it.

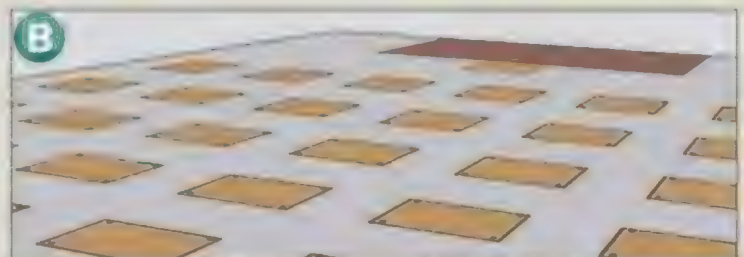


The distance between the desks is 40 cm in width and 50 cm in height. correct

The depth of the desk is 45 cm, so even if you don't memorize the numbers,

If you remember that the space between the desks is about the same as the depth of the desk, you can see it

As you can see, you can do it without making mistakes.



It will be easier to draw if you also draw the grounding position of the foot

## 06 floor point

School floors are made of various materials such as floor PVC sheets, linoleum, and flooring.

The floor PVC sheet is made of polyvinyl chloride, which is basically plastic, so it doesn't matter if it has a linoleum pattern or a flooring pattern. You don't need to be particularly conscious of it when drawing.

Linoleum is made from natural materials such as linseed oil, pine resin, cork flour, wood flour and pigments.

Flaxseed oil is also used on hospital floors due to its antibacterial properties. The colors vary depending on the color of the pigment used in the material, but the floors in schools are usually white, such as beige or gray, but are often blue or green. The linoleum pattern is barely noticeable in the distance, so basically I omit the pattern and paint only with gradation.

Common flooring in housing is called flooring board. Flooring boards are sometimes used in school classrooms, but more often than not flooring blocks are used. Lay it out so that it alternates vertically and horizontally like .

Since flooring blocks are rarely used in houses, they have the advantage of making it easier to recognize that the scene is a classroom when only the floor is visible in the picture.

Since the top view is transformed into a smart object in 05, it can be applied as a floor image after transformation just by opening the smart object and arranging the flooring blocks on the top view and saving it.





# cobblestone



Stone pavement is used when drawing the precincts of temples and shrines and the floors of hot springs. It is also possible to draw a stone wall by applying the method of drawing a stone pavement to draw a wall. By slightly changing the stone color, etc., it can also be applied to Western roads and paving stones for Western-style gardens.

Here I am depicting a stone pavement using granite. Grass is drawn in the joints of the stone pavement (the part between paving stones) in the example, but there is no grass because it is treated or maintained so that it does not grow. I don't mind.

## Drawing point

01

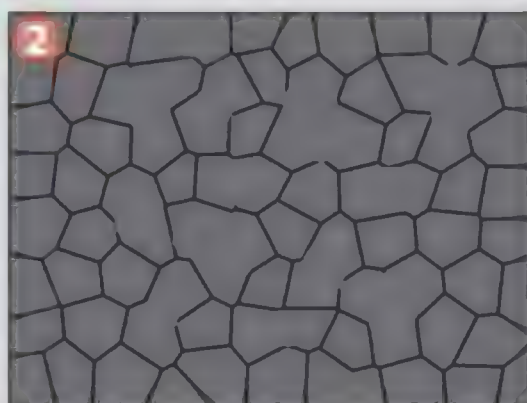
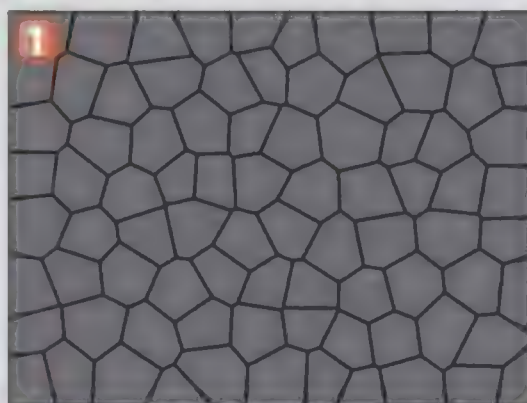
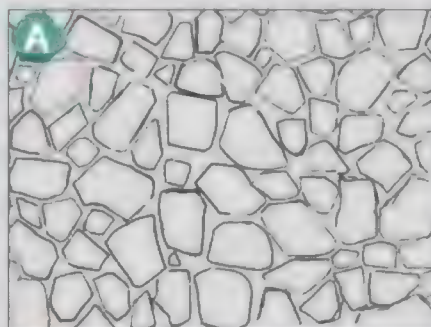
draw paving stones

From here to 5, create the paving stone material. You can create a line drawing by hand from scratch, but for those who can't draw it in the first place, I will explain how to draw a stained glass pattern as a starting point.

- 1 Prepare a layer filled with gray. Apply the [Stained Glass] filter to that layer. Since the drawing color will be the line color, change it to black, then select [Filter] → [Filter gallery] → [Texture] → [Stained glass] from the menu.



set drawing color to black



- 2 As it is, the shape is uniform, so fill in some lines and connect them so that large and small paving stones are mixed.

Prepare to make the seams seamless. Seamless means "without seams" in English. In 106, multiple pieces of paving stone material are connected and arranged vertically. In that case You can't see the joints like an NG example if you don't use a seamless material It's going to be.

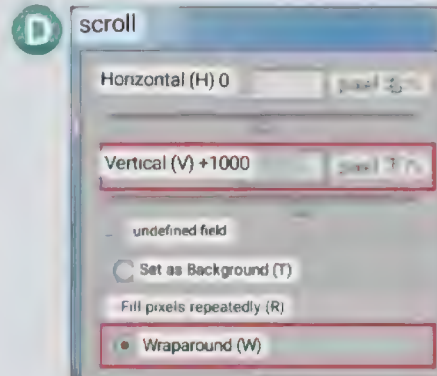
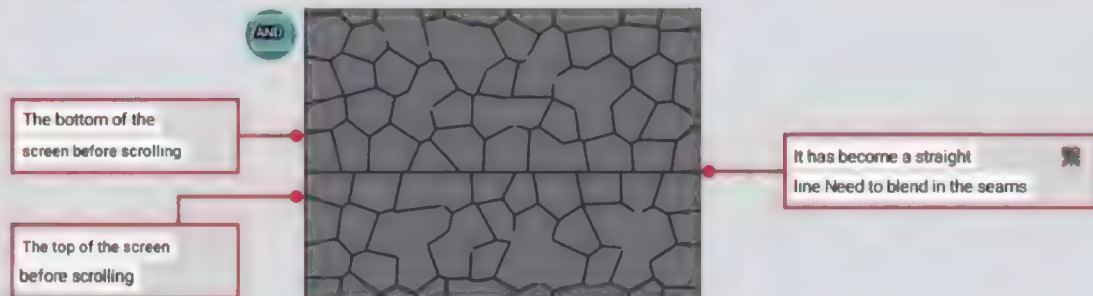
Select Filter > More > Scroll from the menu to shift the entire image so that what used to be the edge of the screen is now in the center of the screen. Move.



seams are not seamless



seams are seamless



Enter a value about half the size of the canvas in [Vertical direction] and check [Wrap around].

When scrolling in the filter, it is necessary to pay attention to the camber when there is data outside the screen of the device. Follow the steps above. If you have a different material image, nothing is drawn outside the screen.

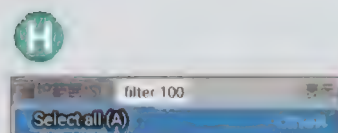
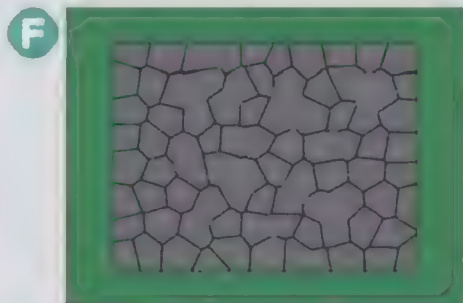
In some cases, there may be data outside the screen. Suppose

**F** that the part painted in green is the part outside the screen.

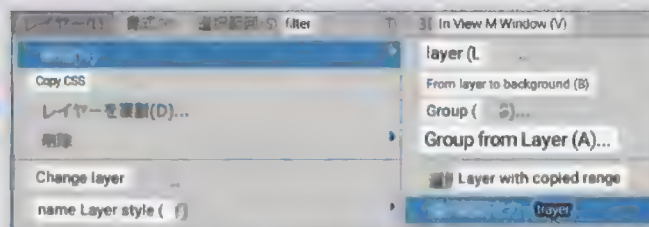
Since it is off the screen, it is not displayed on the actual monitor, but the "scroll" of the filter moves including the part outside the screen. The green is caught and the edges of the cobblestones do not connect.

**H** You need to create a layer with off-screen

information removed like



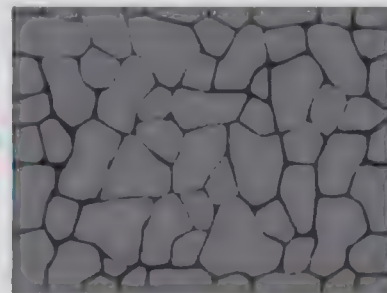
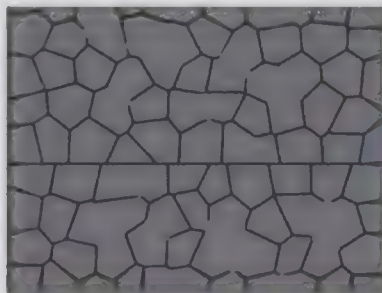
[selection] [select all]



[Layer] → [New] → [Layer with cut selection]



While switching the drawing color at any time with the eyedropper tool, I smooth out the lines so that the joints look natural. Images created with stained glass are angular and hard, so I adjust the shape to remove the corners.



paintpoint

- ① Draw the texture of the joint. From the menu, select [Selection] → [Specify color range] and click the gray part of the flagstone with the eyedropper icon to select only the gray part. Next, from the menu, select [Layer] → [New] → [Layer with selected area cut] to cut the selected area and separate it into a layer for the black line part and a layer for the gray paving stone part. Place the black line layer below the paving stone layer and paint it green to create some unevenness (paint green only when growing plants in the joint).

- ② Draw the texture of the paving stone. Create a new layer, apply a clipping mask to the bottom right layer, and draw the texture of the stone by painting roughly left and right with the "custom brush" brush (p.9).

- ③ Change to a brighter color and apply it again in the same way as ②.

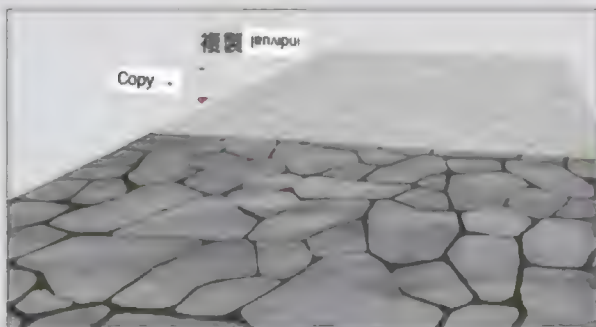
Any layers created here should be made seamless using the scroll filter.



## 06

## Tiling paving material

Duplicate the paving stone material created on the plane, freely transform it and place it side by side. Since it is seamless up to 05, the edges are neatly connected. If it is a flat stone pavement, it will be completed by this process.

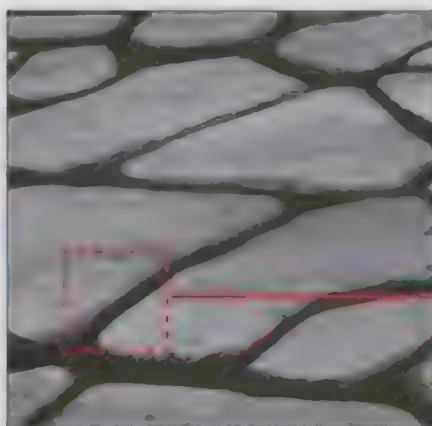
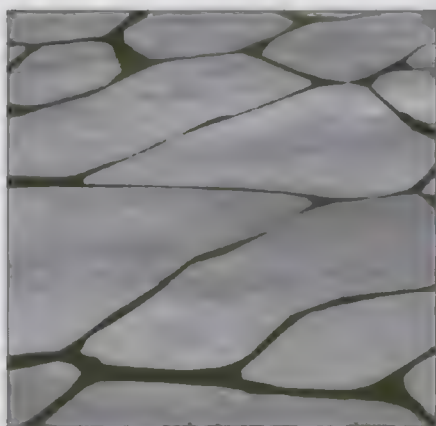


## 07

## draw paving stones

Draw the thickness of the pavement. The drawing method is basically the same as "rock" (p.44). Draw on a single layer. This is the most time-consuming process. By arranging multiple seamless paving stone materials,

Repeating paving stones with a typical shape makes it easier to understand that they have been duplicated, so while drawing, I paint to connect some paving stones or add lines to divide them to eliminate the pattern. .



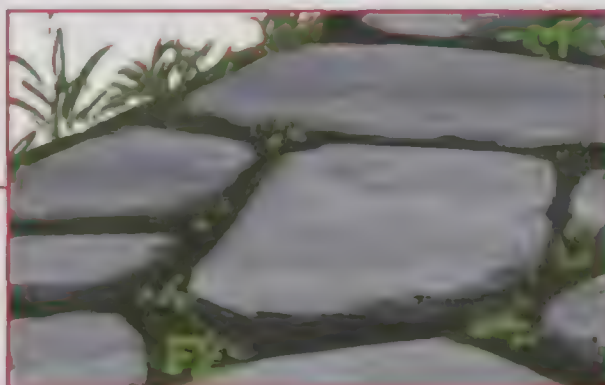
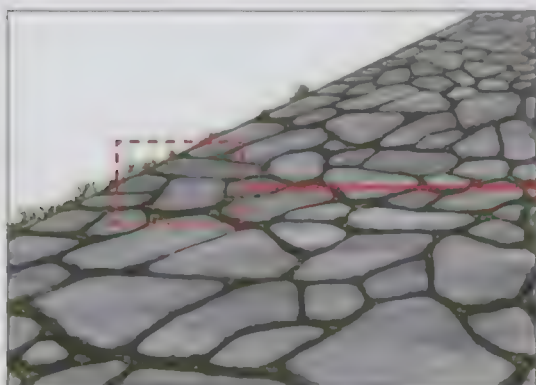
By increasing the number of faces, corners are removed and rounded

## 08

## draw grass

Draw the grass between the paving stones in a lighter green than the base. If it's not very close-up, it's enough to just draw the dots roughly as shown in the figure. Grass is necessary for painting cobblestones.

If the space between the pavement stones is not soil, such as the floor of a hot spring, the grass is not drawn.







There are hedges planted with living plants and bamboo fences made of woven bamboo. There are two types of bamboo fences:

"shielding fences" where the other side is "invisible" and "open fences" where the other side is visible. Furthermore, there are different types (p.195) depending on the shape and material.

Typical shielding fences include "Keninji-gaki", "Osu-gaki", and "Otsu-gaki", and representative fences include "Yotsume-shio", "Ryoanji-gaki", "Kinkaku-ji-gaki" and "Koetsu-ji-gaki". Here, Keninji-gaki, which is the most common bamboo fence, will be used as an example. Since the Keninji fence is a shielding path, it is often used when drawing pictures of hot springs in open-air baths.

## paintpoint

### 01

#### draw bamboo

1 Create a solid color (R221 G182, B116) base layer.

2 Slightly darker color using a large bokeh brush. Paint left and right with (R180, G115, B60).

Use a large bokeh brush to create a slightly brighter color. Fill the center with (R230, G200, B140).

4 Draw a straight line vertically.

5 Duplicate a straight line. gradually darkens with a gradation

If you move the duplicated straight line over the part where the line is drawn, the darkness of the straight line and the color of the gradation behind it will become the same and the line will not be visible. ] to darken.

6 It is not necessary when drawing a single bamboo, but when drawing a bamboo fence, to darken the border with the bamboo on the side, paint the edge with a fairly dark color (R105, G65, B25). increase.



### 02

#### duplicate bamboo

Duplicate bamboo. You can also copy and move it by selecting [Layer] → [Duplicate Layer] from the menu.

#### memo

##### How to duplicate layers

If you press [Ctrl]+[Alt] [command] + [option]], the cursor will change as shown on the right. You can easily duplicate layers by dragging in this state.



## 03

## draw a knot

In reality, it may be longer than that, but the space between the nodes is drawn within 10 times the width.

In this example, the width of the bamboo is 4.5 cm, so within 45 cm. The distance between the 6 nodes is about 20 cm.

Since the distance between the nodes at the base and tip of the bamboo is different,

There is no problem even if the intervals between the joints are different, but they are almost evenly spaced in a single

A piece of about 2m cut for a bamboo fence. Avoid random intervals such as . The knot layer is hidden at 0, so don't merge it with other layers.

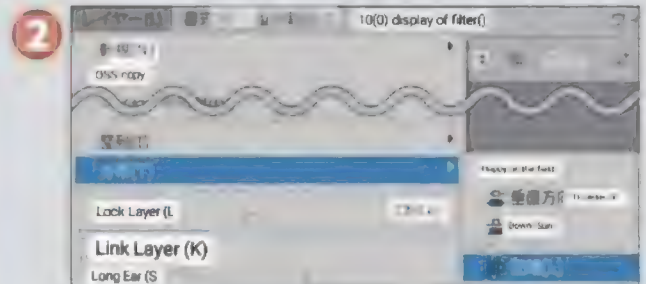
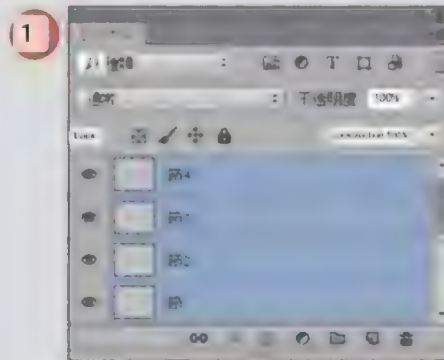


## 04

## align evenly

You can arrange them at regular intervals, but you can arrange them at regular intervals using Photoshop's functions. Even if they are arranged randomly when duplicating, this function can be used to arrange them accurately, which is useful when there are a large number of objects. • Hold down the [Shift] key and select the layers to be evenly spaced.

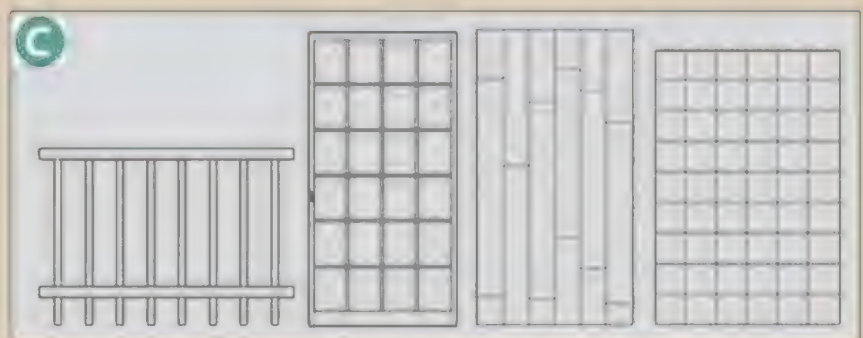
(2) Select [Layer] → [Distribution] → [Left edge] from the menu. Now, from the state of A, it will be arranged at equal intervals like 8.



## memo

Points of the [Distribution] function

The [Distribution] function can be used not only for drawing bamboo joints, but also for drawing various backgrounds such as fences, shoji, flooring, tiles, windows and crosswalks. Select Left Edge for horizontal alignment and Top for vertical alignment.



## 05

## change the color of bamboo

Since a single piece of bamboo was duplicated, all bamboos have the same color. Use [Tonal Correction] to change the color of each bamboo.

However, if you change the hue or lightness too much, you will get a sense of discomfort, so set the value to a very small value of plus or minus 3 or less. Saturation is about 10, and you can change it without any problem. If you have extra energy, it will be better if you add some variation such as adding not only the color but also the condition of the bamboo.



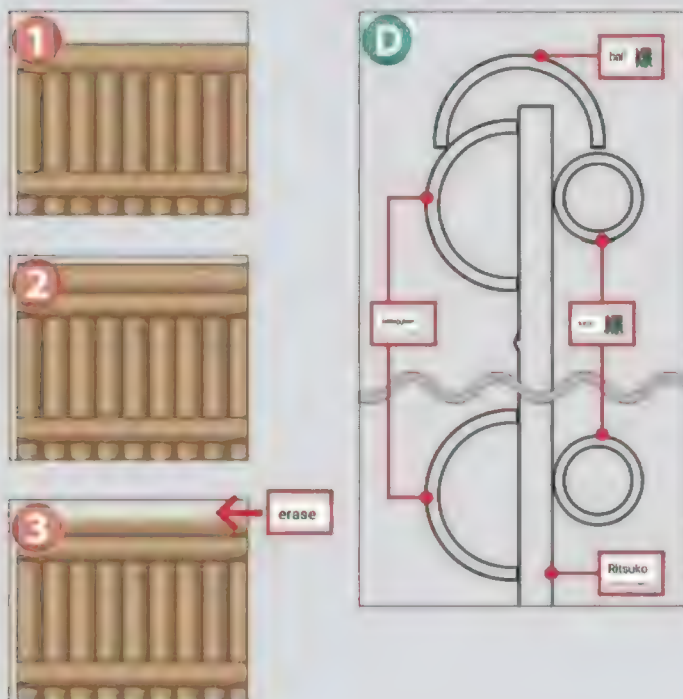


Vertically arranged bamboo is called "Ritsuko", and horizontal bamboo is called "Kami" edge. For Yotsume-gaki, we use unsplit round bamboo, but for the Kenninji-gaki example, split bamboo is used, so the edge is not a cylinder but a semi-cylindrical shape. Duplicate single piece of ritsuko bamboo, and from the menu select [Edit] → [Transform] → [Rotate 90°] to turn it into a horizontal edge. If you want the shims to be evenly spaced, use the [Top edge] of the [Distribution] function. not.



The bamboo that covers the bamboo fence is called "Tamaiben". Says.

- 1 Top of bamboo fence.
- 2 Duplicate the edge.
- 3 The side of the bead is like this. By erasing the top half of the duplicated bamboo in step 2, it looks like it is covered with bamboo.



The bamboo fence is made from fibers of the skin of a palm plant. Secure with the hemp palm rope that was made together.

Draw crossed black lines like an X, and draw a knot in the center. The bead knot looks different from the oshirim knot, but when viewed from above, it crosses the same cross.



push knot



ball amount knot

- 1 Create a shadow layer. Use a brush with a Bokeh foot to draw a shadow under the border with a darker color.



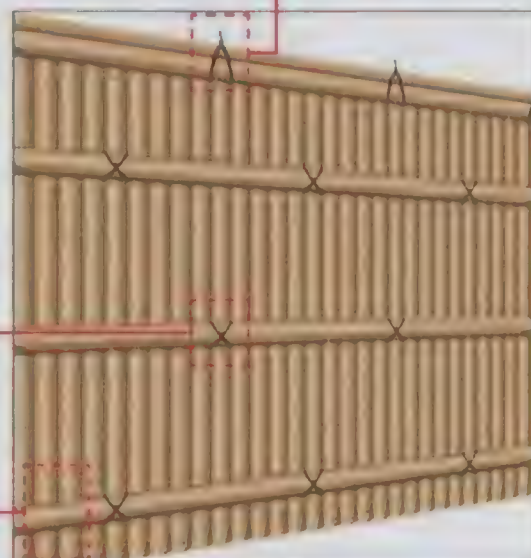
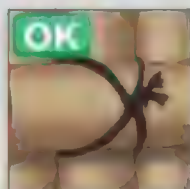
- 2 Lower the [Opacity] of the shadow layer to about "70%"

increase



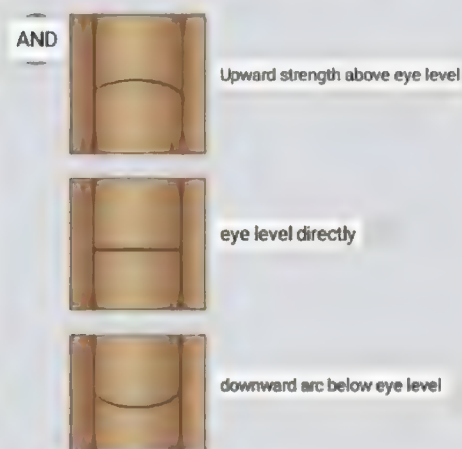
If there is a bamboo fence in front, it will be completed by the previous process. If it is not frontal, it must be deformed to match the perspective.

If you draw everything on a plane and then transform it with the [Free Transform] function, it will look like the NG example. Unless the view is very far away, it is easy to see that the plane has been deformed. It is better to draw the knots and hemp rope after transforming.



However, it takes a lot of time to draw curves for all the bamboo joints, so there is no problem in duplicating the joints of the same height and transforming them with the [Scale up/down] function.

The curve of the circle becomes a straight line as it approaches the eye level. get closer. By deforming it so as to crush it in the vertical direction, it becomes a curve that is close to a straight line.



If you are using a Smart Object (p.98) to transform a bamboo fence with knots drawn on a plane, you can draw the bamboo knots in the psb file of the Smart Object after redrawing them correctly on a separate layer. Hiding the hidden layer allows you to keep track of the location of the node without losing any clues.

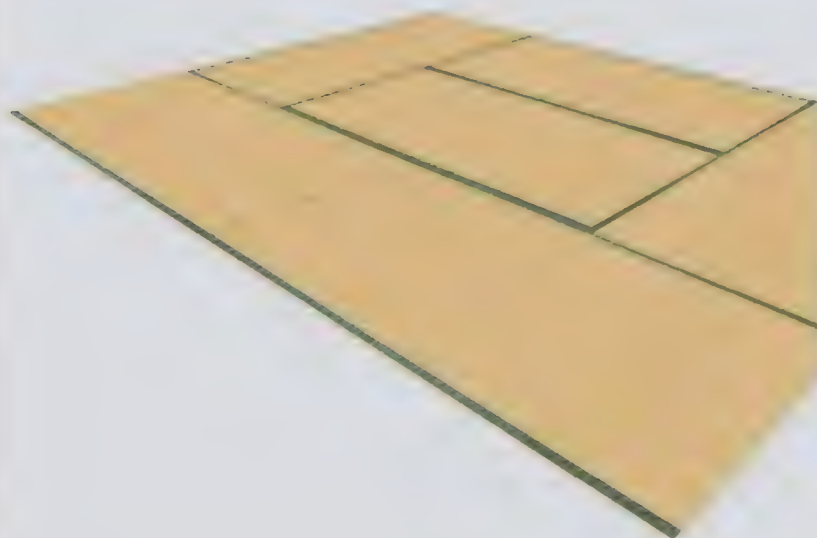
Uyabashira

At the edge of the bamboo fence, draw a thick pillar with a diameter of about 10 cm called a new post. The posts are drawn in the same way as the "tree" trunk (p.49). If the color of the trunk of the "tree" is left as it is, it will be too green.





# tatami



Tatami and Tatami Tatami Tatami is roughly divided into tatami facing, tatami edge, and tatami floor. Tatami Omote is a mat made of woven rush, which is the surface of the tatami mat. Tatami edge is a piece of cloth attached to the end of the long side. The tatami floor is made by stitching together the inner core of rice straw.

There are various sizes of tatami mats, in my case, the standard size is 3 x 6 shaku (91 x 182 cm). The reason is that 6 shaku = 1 ken, but remember that the size of about 90 x 180 cm between half and 1 ken is the same size as "window" (p.148) and "fusuma" (p.184). It has the advantage of being easy.

## paint point

### 01

#### draw a tatami mat

First, I will introduce the general flow of how to draw a tatami

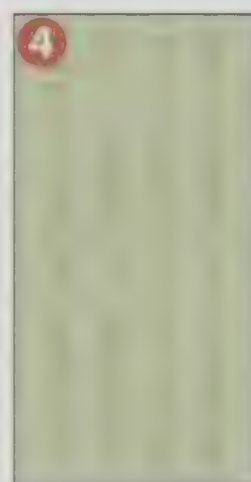
Part will be explained in 02 03.

① mat. Thin Draw vertical lines.

(2) Duplicate and arrange using the [Distribution] function (p.177).

③ Draw a horizontal line.

• Duplicate and arrange.



### 02

#### Draw rush weave (vertical lines)

Draw the vertical lines of the rush weave in the vertical direction.

- Draw a straight line with a width of 2 pixels in the vertical direction. ② From the menu, select [Filter] → [Filter Gallery] Select [-] → [Artistic] → [Coarse pastels] to make the lines choppy.
- ③ Select [Filter] > [Blur] > [Move Blur] from the menu to extend the line horizontally.



## 03

## Draw rush weave (horizontal line)

Draw the horizontal lines of the rush weave in the horizontal

① direction. Draw a horizontal line. It's okay to draw somewhat carelessly.

② From the menu, select [Filter] → [Blur] →

[Blur (Move)] to blur the horizontal lines horizontally.

It is possible to draw a more realistic tatami mat, but even if only the tatami mat becomes as realistic as the photo in the whole picture, it will stand out, so I have limited it to this level of drawing.



## 04

## number of tatami mats

The number of tatami mats is around 60. Subtracting 6 cm from the tatami mat width to the left and right of the tatami mat width is 84 cm. If one eye is 1.4 cm, it will be 60. The number of stitches increases to 64 for large tatami mats, such as the 95.5cm-wide Kyoma.

However, sometimes the number of eyes is intentionally reduced to make the tatami eyes easier to see. The number of tatami mats in the example is also much smaller than the actual number.



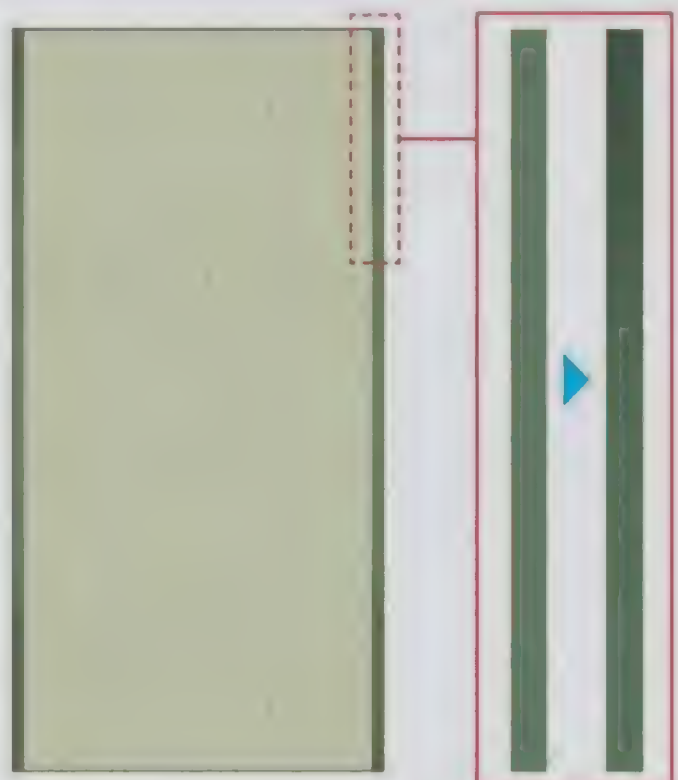
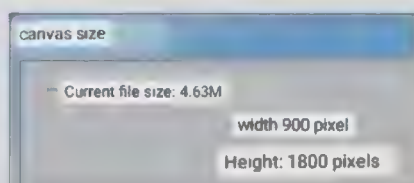
## 05

## draw a tatami edge

draw Bar

The width of the tatami edge is 1 sun (about 3 cm). By setting the canvas size of the top view image of the tatami to a size that is easy to calculate, such as 900 pixels in width and 1800 pixels in height, from the 90 x 180 cm of the tatami, it is easy to understand, such as 30 pixels when selecting a width of 3 cm. can be

A single tatami green color is too simple, so add a slightly darker gradation from the top and bottom to the center as shown in the figure.





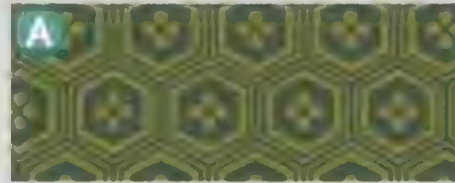
Sakku Masugiku

Patterns such as tortoise shells and chrysanthemums are commonly used for tatami rims. Plain colors are fine, but adding a pattern will allow you to draw more detail in the foreground. For the tortoiseshell hexagon, use the [Polygon tool], set the tool mode to [Bus], and set the [Number of corners] to "6". The masu chrysanthemum shape is drawn using the [Custom Shape Tool] ☆ with the tool mode set to [Bus] and the [Shape] set to [Rhombus Frame].

Duplicate one pattern and line them up to create a pattern texture.

I will

You can make your own pattern textures like this, but you can also purchase and use Japanese pattern material collections.



Tortoise shell

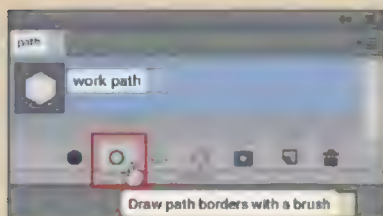
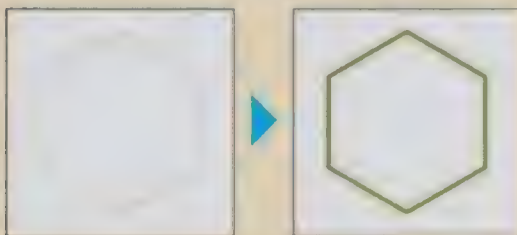


例 (Masugiku)

## memo

draw a line with a path

After creating a bus, switch to the [Plush Tool], select the path, and click [Draw path border with a brush] in the [Bus] window to draw a line with the thickness of the brush at that time.



## memo

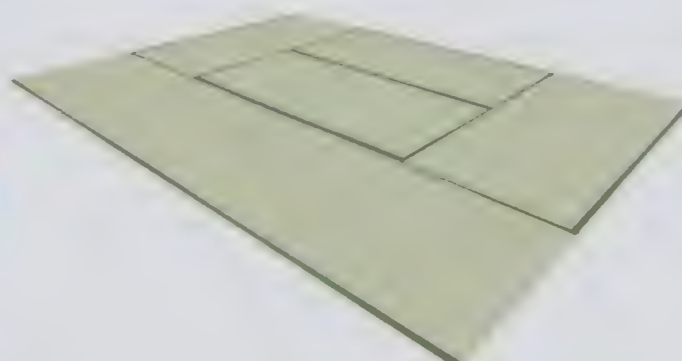
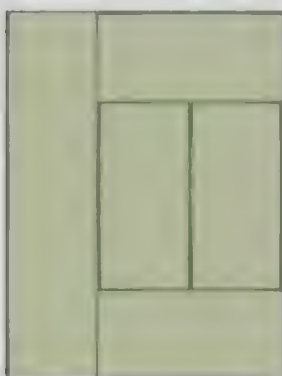
Draw symmetrical figures

Similar to the "clock" hands (p.140), symmetrical shapes use replication inversion. This is also symmetrical top to bottom, so draw only one quarter and use Duplicate Invert.



After making a flat image of a tatami mat completed in the previous process into a smart object, duplicate it and arrange it. After that, it transforms together according to the bass.

If you make it a smart object and then transform it, you can easily change the color of only the tatami facing layer without affecting the tatami edge.



There are two ways to lay tatami mats: ceremonial and non-celebration. Celebration gijiki is a way of laying without a cross, and non-celebration gijiki is a place where there is a cross. It is a laying method with one or more .

The most commonly used one today is the festive mat. It is said that in the old days, people used to lay the floor on a non-congratulatory floor at funerals, but that custom is gone today. It is a good idea to remember that fujogijiki is the method of laying the floors used in large halls such as inns and temples.

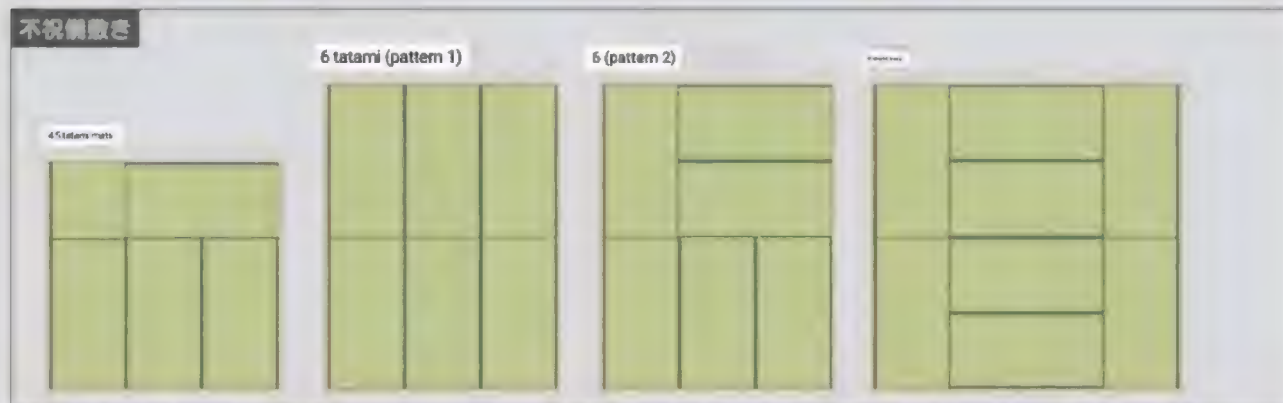


disgraceful cross

## celebration

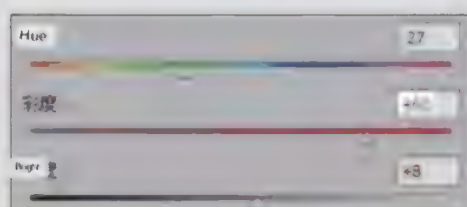
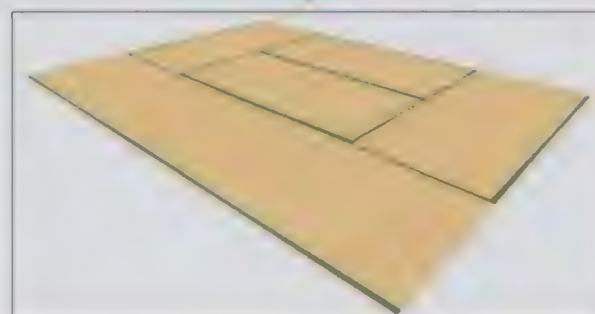
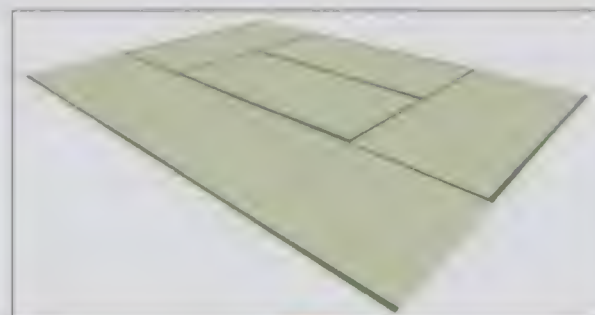


## 不祝儀敷き



New tatami mats are green, but they turn yellow over time. The blue color is complete, but depending on the settings, you may want to change the color.

Here, I use the [Hue/Saturation] adjustment layer to change the color. For lush tatami mats, faded tatami mats can be expressed by setting hue to -27, saturation to +60, and brightness to +8.





# bran



The fusuma consists of "fusuma rim", "pulls", and "fusuma paper" (there is a framework called kumiko inside, but you probably won't get a chance to draw it).

"Fusuma rim" surrounds the perimeter of the fusuma to increase its strength and to prevent stains such as dirt from hands. They are made of wood, and some of them have the wood grain left as they are, but those that have been painted with lacquer are beautiful.

The shape of the "handle" is generally round or oval, but other shapes such as square, rhombus, and quince.

There are various types of fusuma paper, such as torinoko paper, a pale yellow paper that resembles the shell of a bird's egg, and texture fabric, but colors and patterns are the easiest to draw differences in. I guess. Fusuma paper is often bright and pale in color, and generally has a low saturation and number of colors. However, in modern Japanese style rooms, dark colored paper is sometimes used.

## paint:point

### 01

#### drawing on fusuma paper

The size of the fusuma is about 90 x 180 cm. Any canvas size will do as long as the proportions are the same. To make it easier to understand, create a 900 pixels wide and 1800 pixels high, and fill it with the color of fusuma paper.

You can add color unevenness by painting with a slightly different color with a brush, but in the example, I proceeded with a single color.

R 247  
G 239  
B 209

### 02

#### draw the edges of the fusuma

The width of the fusuma edge is about 2 cm. The edge of the tatami mat is 3cm, so it is slightly thinner than the green tatami mat.

• Select the entire bran layer.

(2) From the menu, select [Selection] [Change selection] - [Reduce], and set the reduction amount to 20 pixels.

(3) Execute [Selection] > [Invert Selection] from the menu. Now only the edge of the fusuma is selected.

(4) Fill with the drawing color.

(5) Apply a clipping mask to the bran layer.



The fusuma handle is at a height of about 80cm. The height of the door handle is about 90 cm

degree, so it will be slightly lower than the door handle.

- ① Create a base layer with a circular fill.
- (2) Add highlights along the circle. Paint a
- ③ dark shadow on the upper left side.
- Paint shadows in a slightly lighter color other than the upper left.



Duplicate and arrange the bran. In the case of 2 sheets of fusuma, the handle is on the outside. In the case of two, it opens from the outside to the inside, so it would be a mistake if the pull was on the inside. In the case of 2 pieces, if the handle is on the inside, it is not acceptable, but 4 pieces

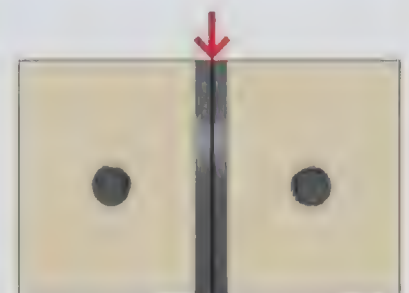
If you do, the two inner ones open from the inside to the outside, so there is no problem with the pull on the inside as shown in the illustration. The inner 2 of the 4 sheets do not overlap, so you will need 2 center fusuma rims.



For 2 sheets of bran



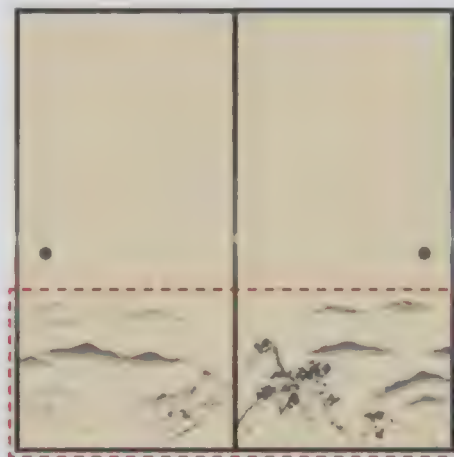
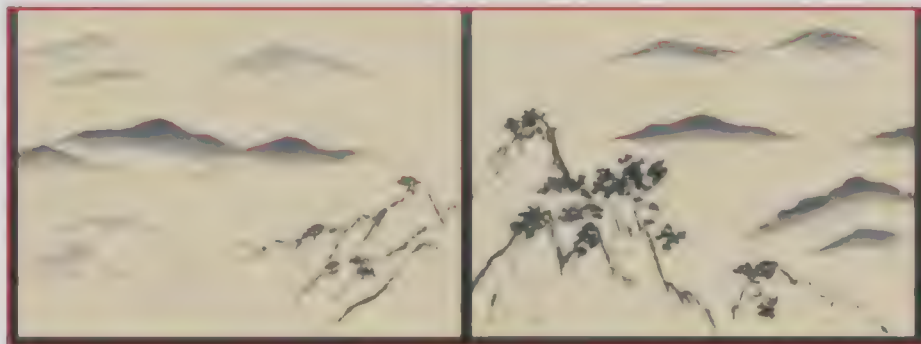
If there are 4 sheets of fusuma, pull handles on the inside of the 2 sheets inside.



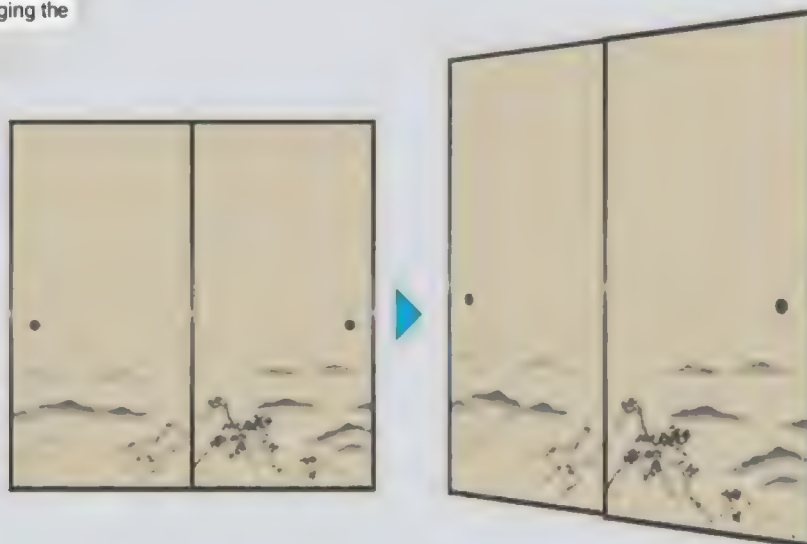
(2 sheets of bran)



There is no problem even if it is plain, but in the example, I drew a landscape pattern. Even if you don't draw it yourself, you can buy a Japanese pattern material collection and use it.



It transforms with the [Free Transform] function according to the verse, but since there is a caveat explained in 107, transform without merging the layers so that they are shifted after transforming the layers.



There is a step between the two sheets of fusuma, so be careful when transforming. The fusuma on the right is in the foreground, just like the "window" (p. 148). In this way, when the left side is the back and the right side is the front side, it is called "right front", and the right side of the sliding fittings is basically the front.

If the edges of the two fusuma fusuma are straight as in the NG example without considering the difference in thickness of the fusuma on the right side, it will be a mistake. It doesn't bother me that much if the picture is viewed relatively from the front, like the finished drawing of the example, but the more the angle is, the more the discomfort becomes noticeable without this step



# shoji



There are various classifications of shoji. Depending on whether or not there is a wainscot (a board at the bottom), shoji without wainscots is called mizukoshi-shoji, and shoji with wainscots is called wainscot-attached shoji.

There are also classifications based on differences in kumiko. Kumiko refers to the thin inner crosspieces. Shoji with many horizontal crosspieces is called Yokoshiji, while those with many vertical crosspieces are called Tateshiji. It is called Aragumi shoji.

Shoji with a glass part is called Nekoma Shoji or Yukimi Shoji. The Nekoma Shoji has a shoji that can be raised and lowered, while the Yukimi Shoji does not have a shoji that can be raised and lowered.

The example is a rough version of the mizukoshi shoji, which is often drawn as a background. It's a group shoji. The size is the same as tatami mats and sliding doors, width 90 cm height 180 cm.

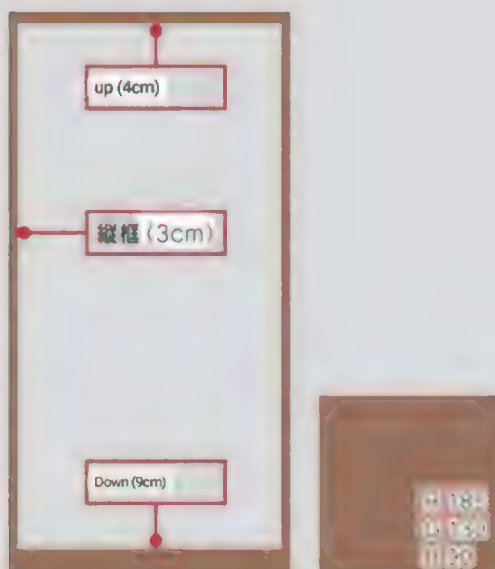
## paintpoint

### 01

Draw the upper rail, lower rail, and vertical frame

The size of the base is the same as tatami mats and fusuma, and the actual size is Multiply by 10 to make it 900 pixels wide and 1800 pixels high. First, draw the principle and the vertical frame. Use the [Rectangular selection] selection tool to select and fill with widths of 40 pixels, 90 pixels, and 30 pixels, respectively.

If you separate the layers, you can draw the wood grain in step 4 so that the clipping mask does not stick out. not.



### 02

Drawing Kumiko

A vertical muntin is called a tateko. The width of the kumiko is about 8 mm, so select the area with a width of 8 pixels and fill it to make a vertical column.

Duplicate this vertical layer and select [Layer] → [Distribution] → [Left edge] (p.177) from the menu to arrange them evenly.

In the case of a shoji with a length of 180 cm and a width of 90 cm, 3 vertical columns are drawn, but the number of duplicates is 5. The two lines at the end are dummies for equal spacing with [Distribution], so delete them after using [Distribution].



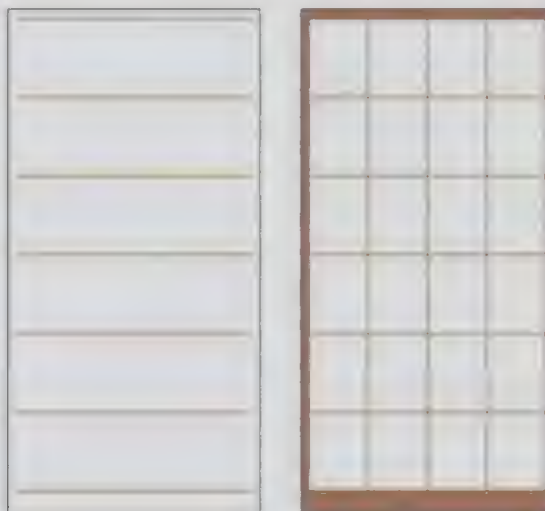
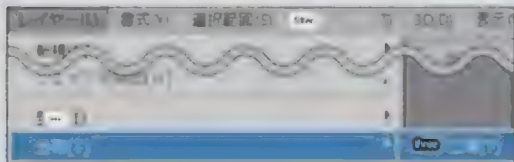


Horizontal muntins are called yokoko. Yokoko will draw 5 lines, so prepare 7 lines including dummies.

Select [Layer] [Distribution] from the menu in the same way as Tateko.

It is used to arrange them at regular intervals, but the direction of arrangement is different, so

Use Top edge.



Draw the wood grain on the upper crosspiece, lower crosspiece, and vertical frame. Mitsuke (front side) is straight grain (p.107) Mitsuke (side side) is generally straight grain.

**A** Draw a vertical line like this and stretch it vertically with the [Free Transform] function to create a wood grain. The vertical lines in the , are not evenly spaced, and there are points where the lines are close to each other and points where they are apart.



The wood grain is also drawn on the kumiko. If the shoji is far enough to see the entire shoji, as in the example, the wood grain will not be visible. So this step can be skipped.

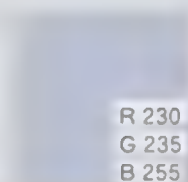
There is no need to paint again for the kumiko. Duplicate the layer on which the vertical frame was painted in the previous process and clipping mask it with the kumiko layer.

If you made a muntin into a smart object (p.98) and duplicated it, you can finish by painting one line and saving it.

vinegar. If you cannot use Smart Objects, reverse the procedure and duplicate after painting.



Paint the shadows of the crosspieces falling on the shoji with light blue (R230, G235, B255).



R 230  
G 235  
B 255



## 07

## draw a handle

191

The handle is drawn at 80cm in the same way as the fusuma.

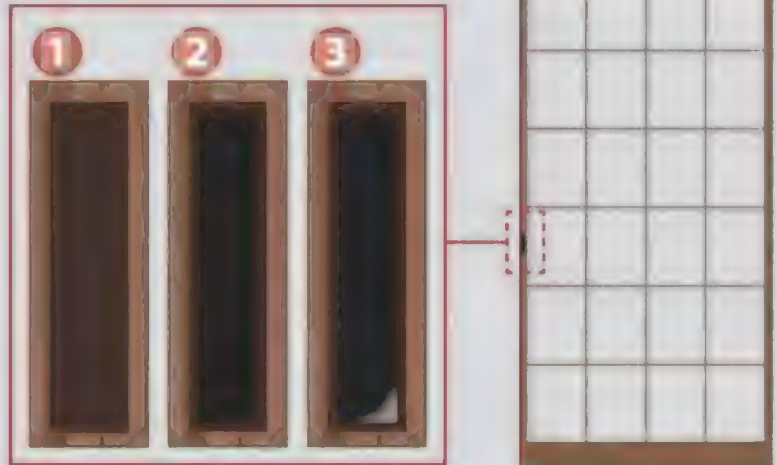
By the way, the height of the doorknob is about 90cm to 1m, which is slightly higher than the handle of fusuma and shoji.

Common.

- Fill with brown (R70, G40, B25).

(2) Select an area that is one size smaller than the brown area and fill it with black.

(3) Draw highlights to give a three-dimensional effect.



## 08

## Transform according to perspective

Use the [Free Transform] function to transform a shoji made from a plane.

vmpg

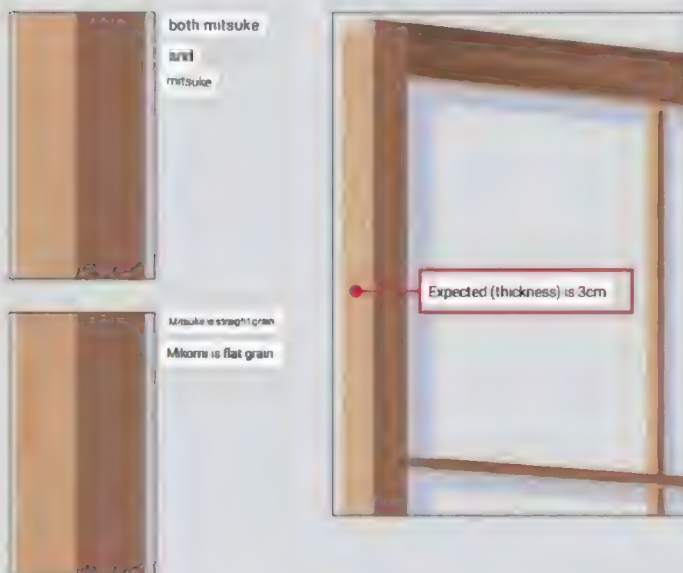


## 09

## Draw a vertical stile prospect

The estimated (thickness) of the shoji is 3cm. Since the mitsuke (front side) is a straight grain, the mitsuke (side side) is a flat grain. It's not wrong to have straight grain on both sides, but in that case, it's a high-grade board (square square p.107).

However, unless you are in a very close-up view of the shoji, you won't be able to tell the difference in the wood grain, so you won't have many opportunities to worry about it.



## 10

## draw the prospect of kumiko

- This is an enlarged view of a part of the kumiko.

(2) Draw the thickness of the shaft.

(3) Draw the thickness of the side. In the case of an angle like the example, the thickness of the horizontal should be extremely thin, but if you try to draw the thickness without thinking about the perspective, it will be NG. is.





## 01 True, OK, Grass

Shingyo Huang is

a form of expression that began with true calligraphy (kaisho), running script, and cursive script.

is. It is used as an expression of Japanese aesthetics, such as tea ceremony gardens and

Japanese-style rooms. "Shin" is the strictest formal style, and "Kusa" is a broken style.

"Gyo" is in the middle of "Shin" and "Kusa".

"Sukiya-zukuri" "Shin" and "Kusa". In a Japanese-style room, "true" is shoin-zukuri, and "grass"

is sukiya-zukuri. In the setting of a high-class house, it would be good to draw in

"true", in a Japanese-style room in an ordinary home in "row", and in a modern Japanese-style room in "grass".

### real grass

formality

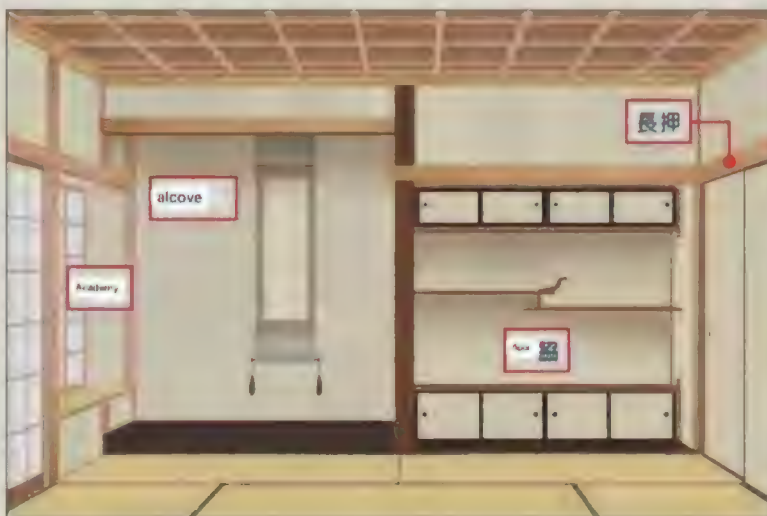


broken form

made by academy

Sukiya style

## 02 Shoin-zukuri and Sukiya-zukuri



made by academy

It is a samurai housing style that was established from the Muromachi period to the early modern period, and later Japanese-style architecture was based on Shoin-zukuri.

tokonoma 壁 土間

The representative elements are "alcove, floor side, and study",

"no

gassho", "long press"

"pillars are prisms", and "ceiling is a coffered ceiling". A "true" Japanese-style

room has all of these elements, and if there is no shoin and only an alcove and tokonoma, it becomes a "gyo" Japanese-style room. Therefore, I have a lot of opportunities to actually draw Japanese-style rooms in the "gyo" style, which is a slightly broken version of the shoin-zukuri style.



### Sukiya style

Sukiya means a tea room, and Sukiya-zukuri is styled like a tea room. Common materials were also used without being bound by the formality of Shoin-zukuri.

Typical elements are "pillars with bark etc."

Ajiro

"Ceilings such as wickerwork ceilings" "There is often no long press."

### memo Ajiro Ceiling

It is a ceiling made by weaving thin boards and bamboo skin diagonally and vertically and horizontally. There are various ways of weaving, but the figure shows

above: both of weaving



## 03 Academy

Shoin was originally a bay window-shaped desk that could be used for reading.

So my knees were under the top board. However, the Shoin

JBukuro

Gradually, it became a tatami room decoration, and under the top plate became a cupboard and a wall.

Illustration: Tokumichi Kono

has a flat surface called 'Tsukeshoin', which protrudes outside the wall.

Hydrex

There is "Taira Shoin".

Also, although the Shoin is located along the porch,

If it is in front of the alcove like tokonoma

It may be on the side. The one that goes into the

alcove like this is called a "Tokumi-Shoin".

It is a Japanese-style room of "gyo" that does not have a study room in modern ordinary homes

Because there are many things, there are relatively few opportunities to draw Shoin.



## 04 Painted walls

The walls of the Japanese-style room are plastered walls made by the plastering method, in which soil and sand are finished using a trowel.

Hand art

There are different types of plastered walls depending on the as clay walls, sand walls, and plastered walls. Plastered walls are sometimes used as a substitute for plastered walls because they are easier to use than traditional plastered walls.

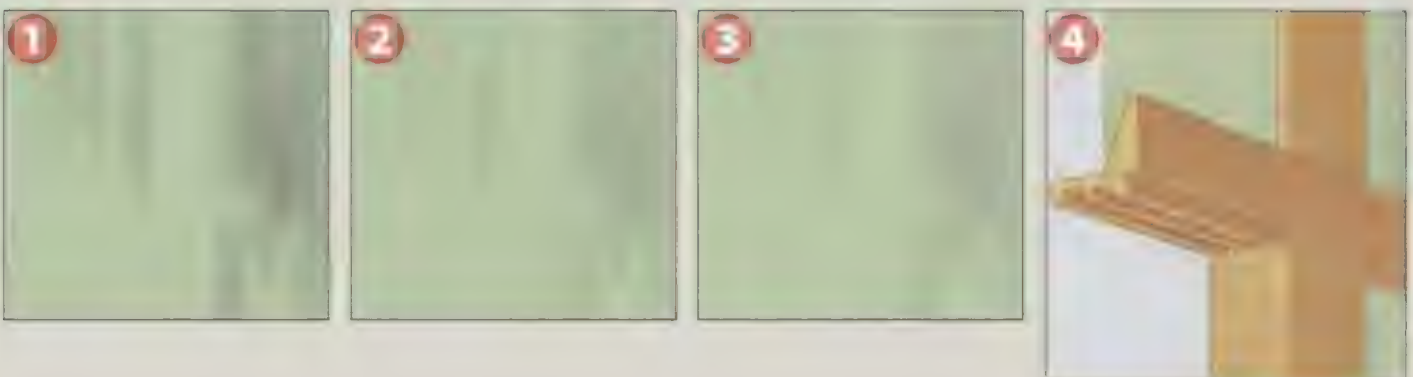
There are various types of trowel finish, such as trowel wave leaving finish, brush finish, fan finish, etc. I don't think you need to worry too much about this pattern, but if you're painting a wall in the foreground, you can stick to it to match the finishing pattern.

① Apply using the "Custom brush" brush (p.9).

(2) I set the [Opacity] of the layer to "50%".

③ Place the texture created in "Lag" (p.96) on the layer with [Divide] mode and [Opacity] set to "40%".

●When you display pillars, it will look like this. In fact, even in steps 1 to 3, the walls are painted while the pillars are always displayed.





## 05 Sill, Kamoi, and

The threshold and Kamoi are the doorways and windows of the Japanese-style room. vinegar. As there is an idiom that says "straddle over the threshold," the lower part is called the threshold, and the upper part is called the kamoi.

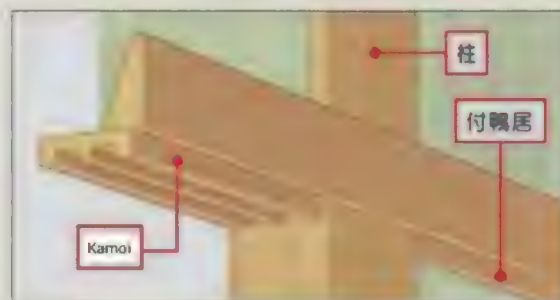
Tsukekamoi  
Tsukekamoi is a decorative material attached to the wall at the same height as the kamoi. Kamoi are used as rails for fittings such as shoji screens, but Tsuke-kamoi exist only for appearance. Kamoi because there is a tsuke-kamoi

There is a sense of unity in the appearance of this part and the other walls. The

difference between the threshold and the kamoi is also the depth of the groove. The threshold groove is 0.5cm. On the other hand, the groove of Kamoi is about 1.5 cm.

If you make the groove depth the same as the kamoi, it will be like an NG example. It may look like you can't make a mistake without being told, but you need to be careful because it's easy to make a mistake if you try to do something like flip it upside

down.



## 06 long press

Hagashi  
The width of the long press is about 80% of the width of the pillar. If it is thin, such as 60-70%, it is called half-long press. Combined with the width of the kamoi and tsuke-kamoi, it will be about the same thickness as the pillar. The thickness of the post is often 10 cm (3.5 sun) to 12 cm (4 sun), so the long press should be about 8 to 9.6 cm. The cross section

of the long press is a trapezoid with 1cm above and 4.5cm below. The protruding chest (the part protruding from the pillar) of long press is 1.5cm.

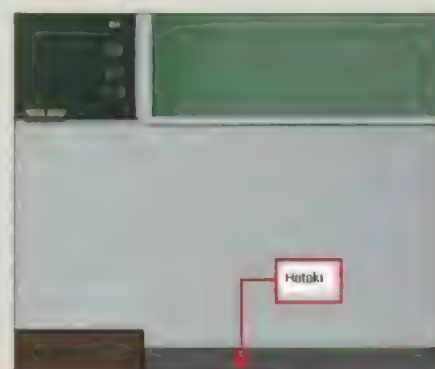


## 07 Tatami matting

The pillars protrude from the wall, so if nothing is done, there will be a gap between the wall and the tatami mats. Tatami-yose is the way to fill it.

Since the chiri (the width from the wall to the surface of the pillar) is about 1.5 cm, the width of the tatami mat is also about 1.5 cm.

Hiba  
In Western-style rooms and school classrooms, baseboards are used as parting materials, but in Japanese-style rooms, tatami-yose is used, so baseboards are basically not used.



## 08 Rim

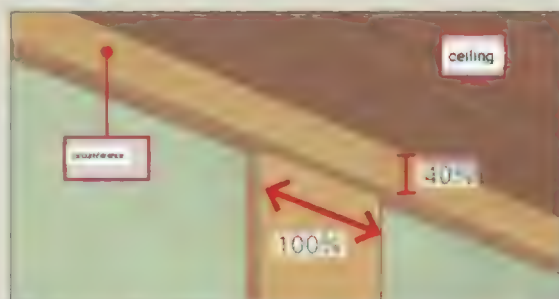
Measured size

Surrounding edge is a parting material attached to the boundary between the ceiling and the wall. The thickness of the surrounding edge is about 40% of the width of the pillar, so for a 12cm pillar it is about 15cm.

The chest protrusion (the part protruding from the pillar) is 1.5cm. The distance from the pillar to the wall is 1.5 cm, so the rim protrudes about 3

cm from the wall. As mentioned above, the rim should be thinner than the pillars and pillars.

However, in the case of a large room, the rim may be double-tiered. Normally, the lower edge of the second tier is thinner than the upper edge, but in the case of a high-class room, the lower edge may be thicker. The thickened bottom edge is called Tenjo. The ceiling support is about 60% of the width of the column, and the total width of the surrounding edge and the ceiling support is about the same as the width of the column.



around only



With ceiling length

## 09 Ceiling

Kotenjo

There are various types of ceilings in Japanese-style rooms, such as coffered ceilings, rod-edge ceilings, and floor ceilings.

A coffered ceiling is common in Shoin-zukuri, which is a "true" Japanese-style room. Even today, coffered ceilings are commonly used in high-class places such as temples and shrines.

There are also cases where the rods on the ceiling are placed at irregular intervals. The number of rod edges is 5 for 6 tatami mats, 7 for 8 tatami mats, and the number of tatami mats minus 1.



canopy ceiling

Ceiling with thin timbers called han. The distance between the flat lines is about 45 cm, is about 1 inch (about 3 cm) square.



Apply from the patio

ceiling without poles



grid patio

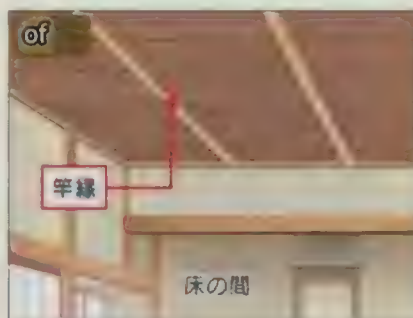
A ceiling made of greenery in a grid pattern. The width between edges is about 45 to 90 cm, and the wire is about 6 cm square.

floor insert

竿 Aji sashimi is a dish with the edge facing the tokonoma, and is considered contraindicated. Therefore, the rod should be parallel to the alcove.

In the case of a rectangular room such as a 6 tatami mat room, there is a rule that the edge of the rod should be parallel to the longer side, so when deciding on the layout, determine the position of the alcove so that it does not become a tokosashi.

In addition, the direction of the ceiling board is reversed between the rod edge ceiling and the floor ceiling. In the rod edge ceiling, the rod edge is parallel to the alcove, and the ceiling board is perpendicular to the alcove.





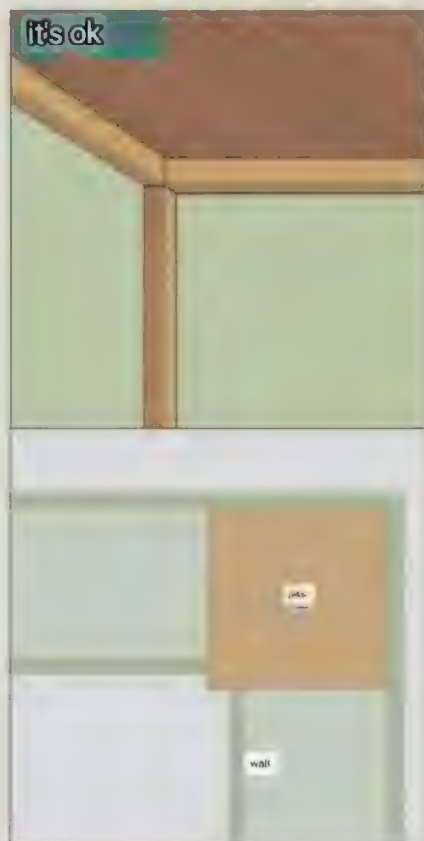
# 10 畳

As with the edge of the ceiling, the tatami mats are arranged so that the edges of the tatami mats are parallel to the alcove so that they do not stick to the floor.



# 11 柱

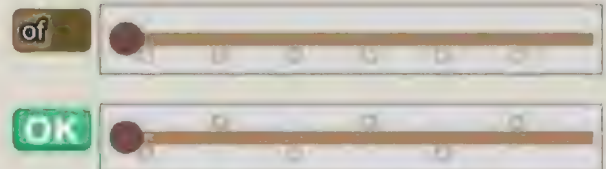
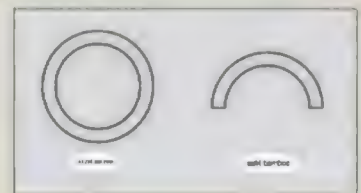
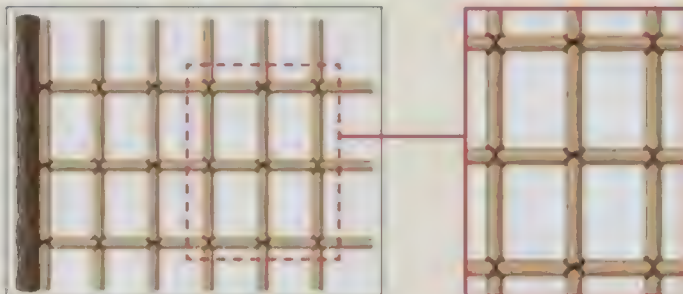
Be careful with the pillars in the corners of the room. If you move the pillars that are inside the room to the edge as they are, it will look like ①. increase. The column in the corner of the room is hidden by both walls, so the visible area is narrow.



## 01 Openwork fence 1 Yotsume fence

It is a representative openwork fence that has been around for a long time. Marutake Ritsuko is used.

Note that the ritsuko alternate between the front and back of the furring. Do not draw all Ritsuko on one side only.



Kinkaku Jigaki 02

## Openwork fence 2: Kinkakuji fence

It is similar to Yotsume-gaki, but it is a representative bamboo fence with a low height. A round bamboo stand is sandwiched from the front and back with split bamboo, and on top Place the bead on it.



Ryoanji 03

## Watermark 3: Ryoanji fence

Like Kinkakuji-gaki, it is a typical foot fence. Kumiko is not a round bamboo, but a combination of two split bamboos. The kumiko is sandwiched between split bamboo edges

Aiko

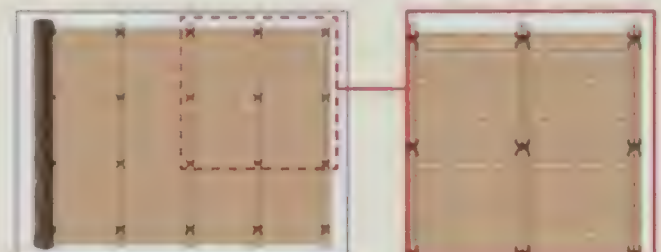


Mt Sugaki 04

## Shielding fence 1: Bamboo blind fence

Misu is a high-class bamboo blind with a cloth edge, and is hung in noble places such as shrines. A bamboo fence is

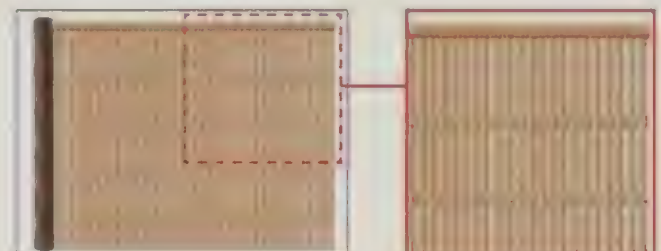
a bamboo fence that looks like a bamboo blind, with thin round bamboos arranged in horizontal muntins.



Otsugaki 05

## Shielding fence 2: Otsu-hani

A bamboo fence with split bamboo shoots woven into the furring.





# Drawing line art with Skillup layer style

## 01 Advantages and disadvantages of drawing line drawings with layer styles

I will explain how to draw line art using layer styles. The method described here has the advantage that you already have a base layer when you start painting. On the contrary, the demerit is that it becomes a uniform line without strong and weak.

Considering the disadvantages, I don't think it's very suitable for drawing — characters. Also, you don't have to try to draw everything with just lines with layer styles, you can use it in combination with drawing lines using the brush tool.

To do. The

line drawings in the examples in this book also use this layer style line and the line drawn with the brush tool.

## 02 Types of layer styles that can be used for line drawings

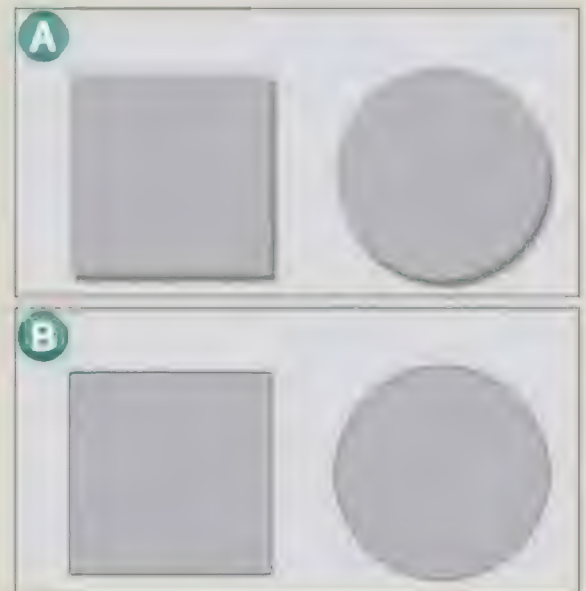
Line art can be drawn using the layer style [Border] or [Drop shadow].

The layer style [Drop shadow] is originally a function used to cast shadows like . Basic logo design

I think that it is a function used for such as. As

the name suggests, drop shadow is a shadow effect, so the light source and It is effective only on the opposite side, but by changing the setting

You can create the effect of thin lines surrounding the silhouette, like ●.



## 03 Display the [Layer Style] window

Select the newly created layer in the Layers window, click the Add Layer Style icon, and choose Drop Shadow. This will bring up the Layer Style window. If you

want to make a thick line, [Drop shadow] will blur, so it is better to use the [Border] layer style.



## 04 Set drop shadow

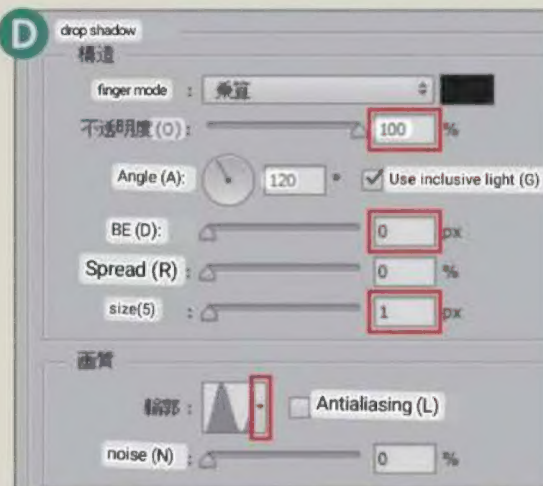
Set the Drop Shadow settings in the Layer Style window

as follows:

- Opacity: 100
- Distance: 0
- Size 1
- Contour ring

The contour can be selected by clicking ▼ like . After completing the settings, press the [OK] button to confirm. This completes the Drop [Shadow] settings.

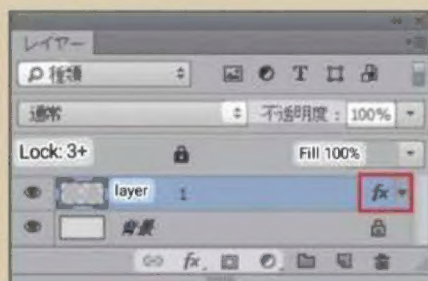
By the way, when using the layer style [Border], just change the size to your preferred value between 1 and 5px, and do not change other items.



**memo** If you want to re-edit the settings once confirmed

Reorganize settings once confirmed

If you want to delete it,  
Click [Layer Style] on the right  
double-click the icon of the  
Then click [Layer Star] again.  
layer name to open the File window.



## 05 Draw a line drawing with a layer style

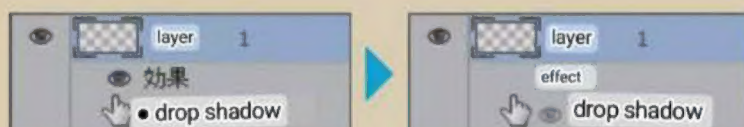
If you paint with white while the [Drop shadow] layer style set in the previous steps is applied, a black line will appear on the edge like the sun. With this method, you can automatically draw the outline of the line drawing just by drawing the silhouette.



**memo** hide effect

You can hide layer styles like by clicking the effect's eye icon. Click again to show layer styles

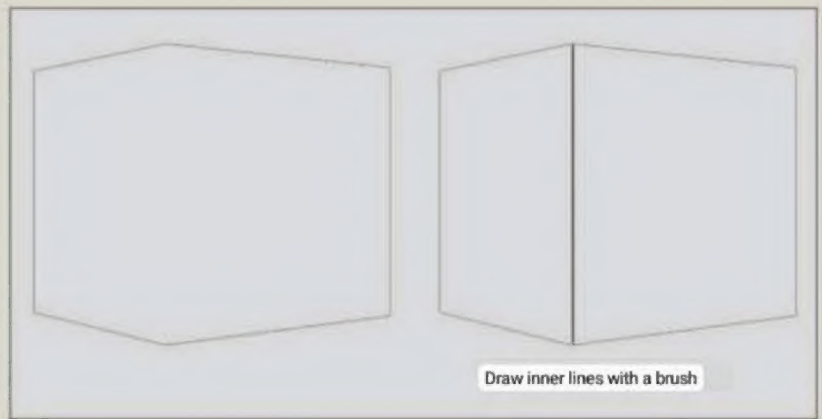
increase





## 06 Draw the inner lines with a brush

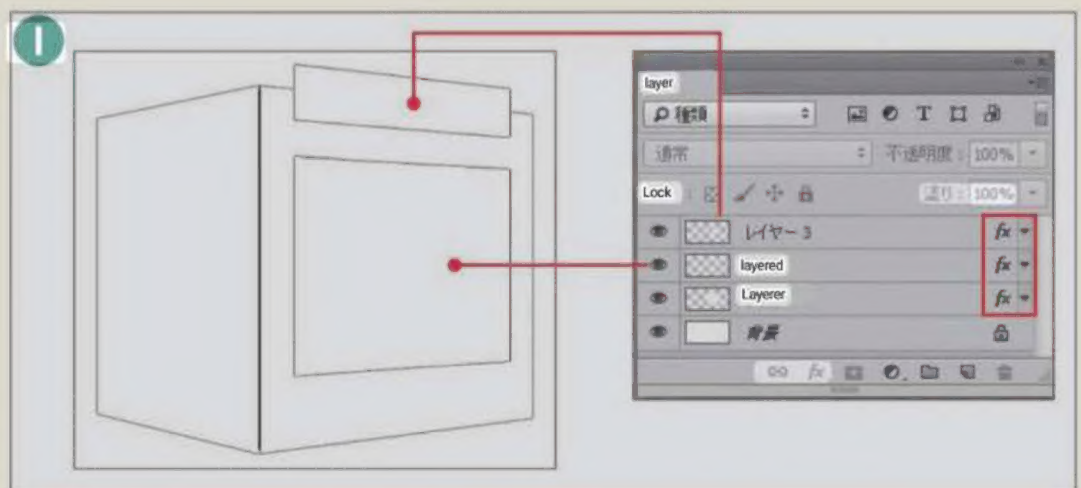
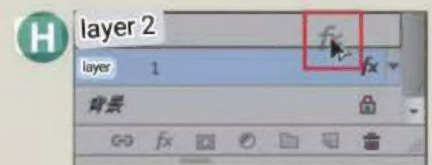
Layer styles only draw outlines,  
so inner lines should be drawn  
normally with the [Brush tool].



## 07 Duplicate layer style

It takes time and effort to set layer styles for multiple  
layers each time. You can drag the layer style to move the effect to  
another layer, but if you press the [Alt] [option] key, an icon will appear  
and you can copy it instead of move it.

If you apply the layer style effect to multiple layers, you  
can draw lines using only the layer style inside.

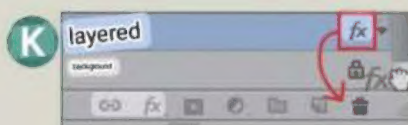
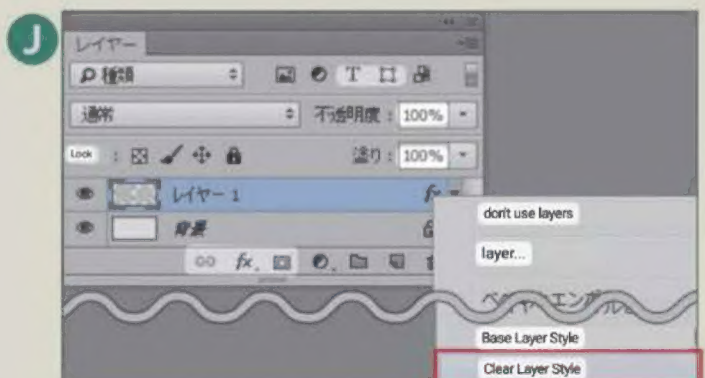


## 08 Clear layer style

You can show or hide the layer style's  
effect by clicking the eye icon, but sometimes  
you may want to clear the layer style instead  
of just hiding it. If so, right-click  
(secondary-click) the layer and select Clear  
Layer Style [Clear].

A layer style can also be deleted by dragging  
the layer style icon to the trash can.

K



## index

alphabet

psb file 98

### A

 empty 8

line Rain

Rain Brush

29 [Arrange] 25

Cobblestone 172

Cross grain 107

adjust color 19

Rock 44

Universe 32

28 Seaside

Circle guide 112,123,126

74 Yen Perth 112

[Replace] Filter 137

Office Chair 122

### Ka

row curtain 152

Painting 144

Mirror 119

Picture Frame

[Custom Shape Tool] 132,182

144 Custom Brush 9


School Chair 156

School Desk 160

Attaching the pattern to the curved

surface 135 Adjusting the color of the wood 168

Classroom 169

 like 79.119

Teaching Zhuo 166

podium 166

Specular reflection 110

[polar] filter 138

draw a metal bar 109

Aerial Perspective 66

Grassland 36

grass brush 39

cushion 134

Cloud 8.12

cloudy sky 24

[Gradient Editor] 17

clipping mask 13

Glare 101

pebble brush 41

brush effects 62

light 35

Caustics R3 Draw

draw five legs 122

Sakura

60

Draw symmetrical shapes

140 Grainy texture 96

Seamless 173 Ceiling

light 116 Draw

paving stones

ground 40

集光模様 172

Tree 48

Shoji 187

draw wrinkles 134

water drop 94

83 Water surface

78,82,86 [Scroll] filter

173 Smart object 98

Nebula brush 33

Sofa 130

### Ta

Downlight 112

line [Polygon tool] 123,182 Tatami

Bamboo fence 176

180 [Tool]

Adjustment Layer 19,61

preset] 9 Point join drawing

Shrubs 52

Apply textures to cylinders 128

Deformation 53

draw reflections 47

television 100

method 52,67 Equally

177

spaced auxiliary lines 131

concentric circles

161 clock 138

na line

[Navigator] 25

Thunderhead 12

Brush that can be pulled out 50

painted wall 191

Non-glare 101

wa

line leaf

56 harmony processing

129 highlight 91.106

TE 63

[Splash] Filter 27

[Puppet Warp] 136

Banding 27,43 Blend

Mode 34 Reduce

File Size 151 Bran 184

fibonacci number 48

Plastic

[Distribution] 177,187

solid layer 90

Bottle 126 Make

\*Bokeh foot big brush 8

star brush 20

Stars Shine 20

Ma row

straight grain 107

Window 148

Draw full moon 22

Lake 78

Waterside

90 Water pattern

82 Turn wood into gold 145

Draw the second line 105,188

Ya line

palm 70

山 66

evening sky 16

night sky 20

Ra

line 96

Layer comp 92 Draw

line art with layer style

196 Duplicate

layer 28 Layer mask

91 Low table 108

Low board 104

Wa line


[Warp] 128 Japanese

Style Room 190

Translated text

 Select all

 Listen

 Share

 Download Japanese

 Open in Translate



## Izumoji Zensuke

After graduating from Hosei University, he was involved in background art production as an art director for game machine development. After that, he engaged in background art production for PC game development, and published "Background CG Technique Guide" (Kogakusha) in 2011. Currently engaged in the development of smartphone game apps as an art director. A website that explains how to draw background art I run it.

"CG Background Lecture BLANK

COIN" <http://blankcoin.com/>

Support page of

this document <http://isbn.sbcr.jp/72298/>

## "background" of a digital

Illustration

Draw with Photoshop! Landscapes and items that color the scene 46

February 6, 2015

First edition 1st printing published

March 19, 2015

2nd printing of the first edition

author **Izumoji Zensuke Izumoji**  
 The issuer **Jun Ogawa**  
 Publisher **SB Creative Co., Ltd.**  
 〒106-0032 2-4-5, Roppongi, Minato-ku, Tokyo  
<http://www.sbcr.jp/>  
 printing **Shinano Co., Ltd.**

typesetting **Feng Gang House**

binding **Watanabe**

\*Efforts were made to ensure accurate descriptions in the publication of this book, but the contents of the descriptions, etc.

It does not guarantee anything.

\*Irregular pages and missing pages will be replaced. Small company sales department (03-5549-1201)

Please contact me.

\*The list price is indicated on the cover.